

**WE CONNECT  
WE PROTECT**



**佳邦科技股份有限公司**  
INPAQ TECHNOLOGY CO., LTD.

**INTEGRATED  
COMPONENTS  
SOLUTION**

**2025**



**More Info:**

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# INPAQ Integrated Components Solution

We are INPAQ. Globally competitive and premium solutions of RF Antenna/Passive Components Multiple ODM/OBM/OEM services.

With independent R&D, in-house manufacturing, and patented processes, we serve over 100 global international brand customers, dedicated to creating connection and protection solutions essential for daily life.



## Inductor

- SMD Power Inductor
- RF Inductor

## Over Voltage Protection

- ESD Suppressor
- Multilayer Varistor
- TVS Diodes

## EMI Suppression Filter

- Common Mode Choke
- Ferrite Chip Bead

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# INPAQ Integrated Component Solution

## Inductor

INPAQ's **inductors** own multiple process technique, such as Metal molding, Multilayer, and Wire-wound types. Besides multiple processes, INPAQ also has optimally design ability to realize the small size and high performance inductors.

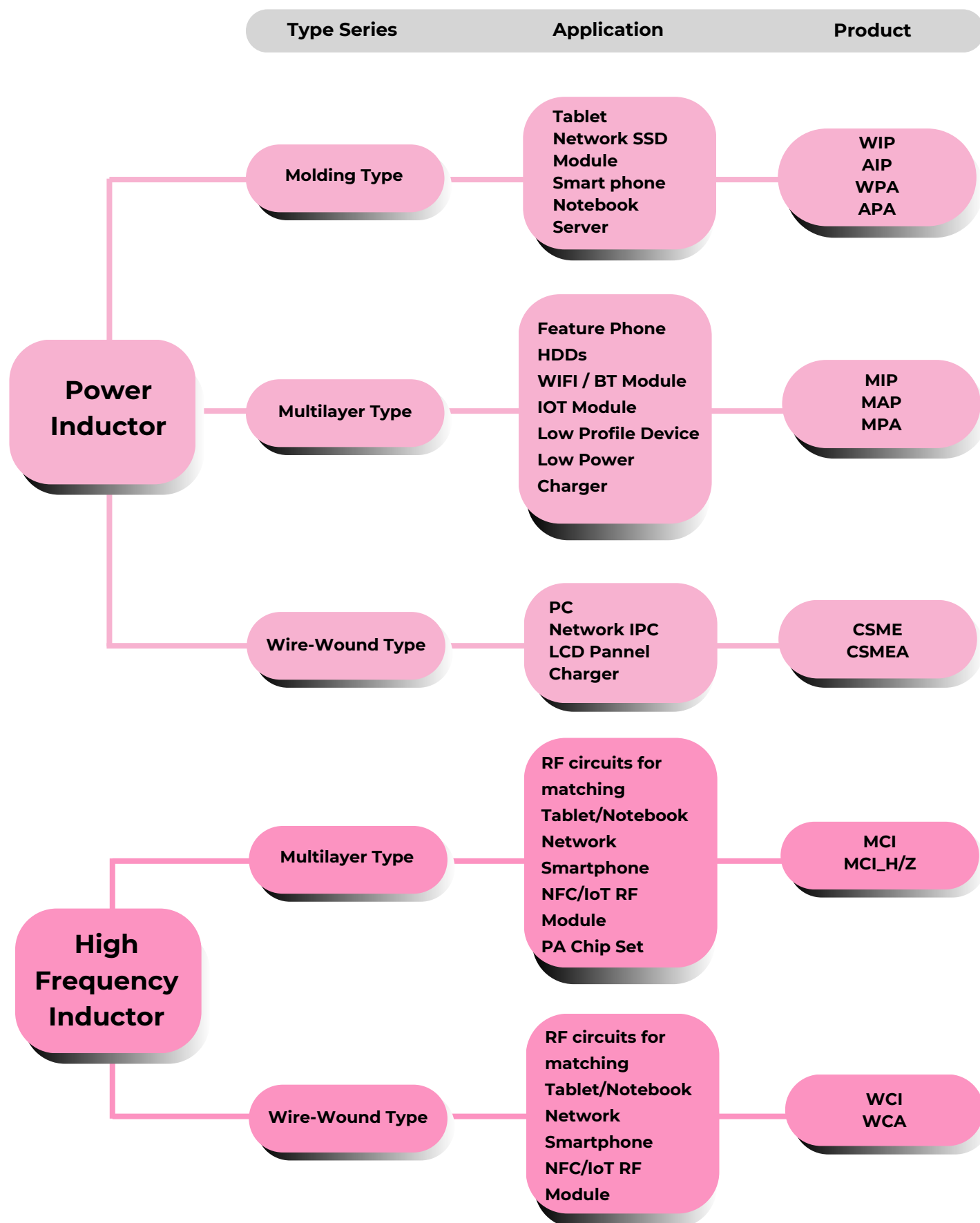
INPAQ offers a broad lineup of chip inductors, applications ranging from consumer use to automotive applications that require high reliability, such as high-frequency circuits, power supply circuits, in-vehicle PoC, short-range wireless communication, etc.

 **Automotive grade (AEC-Q200)**

| Structure  |                  | Series                                                                                                                                                                                         | Description                                                                                                                                                                                                                                                                                                                                      |
|------------|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Molding    | Metal            | WIP<br>WPA <br>AIP<br>APA  | This product can be used for a wide range of <b>high current power circuits</b> from smart phones to industrial electronics and automotive device applications.<br>It is composed by <b>metal alloy materials</b> and manufacture by molding process.                                                                                            |
|            |                  |                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                  |
| Multilayer | Metal Alloy      | MAP                                                                                                                                                                                            | This product is monolithic construction performs high reliability and ensures a closed magnetic flux in a component avoids magnetic leakage and interference. It's allow for <b>higher mounting density and low DC resistance</b> .                                                                                                              |
|            | Ferrite          | MIP<br>MPA                                                                                                  | This product is characterized by <b>small size and low profile</b> , such as the 2016/2012/1608 and the <b>height can below to 0.5mm</b> . It can be used for lower power circuits, such as wearable devices, IoT Module and automotive device applications. It is composed by ferrite materials and manufacture by multilayer printing process. |
|            | Ceramic          | MCI<br>MCI_H/Z                                                                                              | Particular ceramic material and coil structure provid high frequeny application <b>range up to 10GHz</b> .                                                                                                                                                                                                                                       |
| Wirewound  | Ferrite Assembly | CSME<br>CSMEA                                                                                               | This product is characterized by its wide range of inductance. It is widely be used in <b>DC-DC power</b> supply circuits.                                                                                                                                                                                                                       |
|            | Ceramic Assembly | WCI<br>WCA                                                                                                  | This product is wire wound type ceramic inductor. And our product provide <b>high Q value</b> . So INPAQ chip inductor can be <b>SRF(self resonant frequency)</b> industry. This can often eliminate the need for variable components in tuned circuits and oscillators.                                                                         |

# Inductor Solution

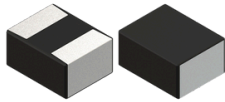
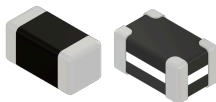
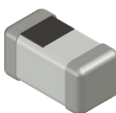
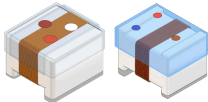
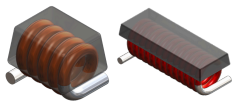
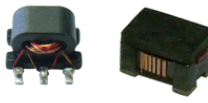
## Inductor Series





# Inductor Solution

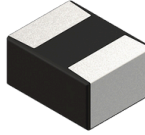
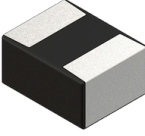
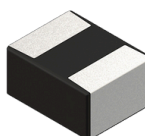
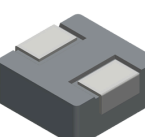
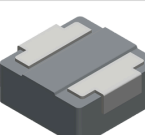
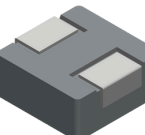
## Process & Package

| Process       | Package                                                                                                                                                 | Feature                                                                                                                                                                                                                                                                                                               |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Metal Molding | <b>Mini Molding</b>                                                    | <ul style="list-style-type: none"> <li>SMD Miniature type</li> <li>1412~3225 mmi size</li> <li>Apply for Smartphone, Modules, Memory, PC/NB, Netcom</li> <li>Compliance AECQ-200 </li> </ul>                                       |
|               | <b>Big Molding</b>                                                     | <ul style="list-style-type: none"> <li>SMD type</li> <li>High Saturation</li> <li>Lower DCR</li> <li>3030~1717 mmi size</li> <li>Apply for Montherboard, VGA, Server, Memory, NB, Netcom</li> <li>Compliance AECQ-200 </li> </ul> |
| Multilayer    | <b>Ferrite</b><br>Chip Bead<br>Power Inductor<br>Common Mode Filter  | <ul style="list-style-type: none"> <li>SMD Miniature Type</li> <li>Better Solder ability</li> <li>Low Profile</li> <li>Compliance AECQ-200 </li> </ul>                                                                           |
|               | <b>LTCC Ceramic</b><br>Chip Inductor                                 | <ul style="list-style-type: none"> <li>0603~ 1608 mm Size</li> <li>High Q value, High SRF</li> <li>Tight Tolerance</li> <li>Compliance AECQ-200 </li> </ul>                                                                      |
| Wire-Wound    | <b>Chip Inductor</b>                                                 | <ul style="list-style-type: none"> <li>High Q value, High SRF</li> <li>Small chip suitable for surface mounting</li> </ul>                                                                                                                                                                                            |
|               | <b>Air Coil</b>                                                      | <ul style="list-style-type: none"> <li>High Q</li> <li>Customize winding</li> </ul>                                                                                                                                                                                                                                   |
|               | <b>RF Balun</b>                                                      | <ul style="list-style-type: none"> <li>Low insertion Loss</li> <li>SMD Type</li> </ul>                                                                                                                                                                                                                                |
|               | <b>Shiedling, Unshieding Choke</b>                                   | <ul style="list-style-type: none"> <li>SMD Type</li> <li>Dip Type</li> <li>Customized</li> </ul>                                                                                                                                                                                                                      |

# Inductor Solution

## Product Line Up

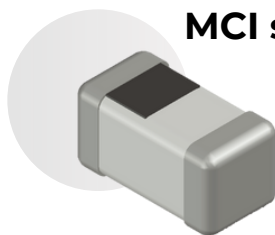
 Automotive grade (AEC-Q200)

| Category                     | Product Image                                                                       | Size Code (inch/mm) | T Size Max(mm)          | Inductance |     |     |    |    |    |     | Inductance Range (uH) | AEC-Q200 | Series                                                                                          |
|------------------------------|-------------------------------------------------------------------------------------|---------------------|-------------------------|------------|-----|-----|----|----|----|-----|-----------------------|----------|-------------------------------------------------------------------------------------------------|
|                              |                                                                                     |                     |                         | uH         |     |     |    |    |    |     |                       |          |                                                                                                 |
|                              |                                                                                     |                     |                         | 0.1        | 1.0 | 6.8 | 10 | 33 | 50 | 150 |                       |          |                                                                                                 |
| Thickness Type               |    | 0605/1412           | 0.65                    |            |     |     |    |    |    |     | 0.1~0.47              |          | WIP-K/V                                                                                         |
|                              |                                                                                     | 0605/1412           | 0.8                     |            |     |     |    |    |    |     | 0.1~0.47              |          |                                                                                                 |
|                              |                                                                                     | 0805/2012           | 0.8                     |            |     |     |    |    |    |     | 0.1~0.47              |          |                                                                                                 |
| General L Type               |    | 0805/2012           | 1.0                     |            |     |     |    |    |    |     | 0.1~2.2               |          | WIP-P/S/Y/A                                                                                     |
|                              |                                                                                     | 0806/2016           | 1.0                     |            |     |     |    |    |    |     | 0.1~4.7               |          |                                                                                                 |
|                              |                                                                                     | 0806/2016           | 1.2                     |            |     |     |    |    |    |     | 0.1~2.2               |          |                                                                                                 |
|                              |                                                                                     | 1008/2520           | 1.0                     |            |     |     |    |    |    |     | 0.1~4.7               |          |                                                                                                 |
|                              |                                                                                     | 1008/2520           | 1.2                     |            |     |     |    |    |    |     | 0.1~4.7               |          |                                                                                                 |
|                              |                                                                                     | 1210/3225           | 1.2                     |            |     |     |    |    |    |     | 0.1~6.8               |          |                                                                                                 |
| Auto Grade                   |  | 0806/2016           | 1.0                     |            |     |     |    |    |    |     | 0.1~4.7               | ✓        | <br>WPA-S  |
|                              |                                                                                     | 0806/2016           | 1.2                     |            |     |     |    |    |    |     | 0.1~2.2               | ✓        |                                                                                                 |
|                              |                                                                                     | 1008/2520           | 1.0                     |            |     |     |    |    |    |     | 0.1~4.7               | ✓        |                                                                                                 |
|                              |                                                                                     | 1008/2520           | 1.2                     |            |     |     |    |    |    |     | 0.1~4.7               | ✓        |                                                                                                 |
|                              |                                                                                     | 1210/3225           | 1.2                     |            |     |     |    |    |    |     | 0.1~6.8               | ✓        |                                                                                                 |
| General Molded Type          |  | 1616/4040           | 2.0                     |            |     |     |    |    |    |     | 0.1~10                |          | AIP-MB                                                                                          |
|                              |                                                                                     | 2020/5050           | 1.5/1.8/2.0/3.0         |            |     |     |    |    |    |     | 0.1~33                |          |                                                                                                 |
|                              |                                                                                     | 2525/6060           | 1.5/1.8/2.4/3.0/4.0/5.0 |            |     |     |    |    |    |     | 0.1~47                |          |                                                                                                 |
|                              |                                                                                     | 3030/7070           | 5.0                     |            |     |     |    |    |    |     | 0.22~22               |          |                                                                                                 |
|                              |                                                                                     | 4040/100100         | 3.0/4.0/5.0             |            |     |     |    |    |    |     | 0.1~100               |          |                                                                                                 |
|                              |                                                                                     | 5050/130130         | 4.0/5.0/6.0/6.5         |            |     |     |    |    |    |     | 0.1~150               |          |                                                                                                 |
|                              |                                                                                     | 6767/170170         | 7.0                     |            |     |     |    |    |    |     | 0.1~150               |          |                                                                                                 |
| High Performance Molded Type |  | *1616/4040          | 2.0                     |            |     |     |    |    |    |     | 0.22~4.7              |          | AIP-GX                                                                                          |
|                              |                                                                                     | 2020/5050           | 3.0                     |            |     |     |    |    |    |     | 0.22~22               |          |                                                                                                 |
|                              |                                                                                     | 2525/6060           | 3.0                     |            |     |     |    |    |    |     | 0.22~22               |          |                                                                                                 |
| High performance Auto Grade  |  | 2020/5050           | 3.0                     |            |     |     |    |    |    |     | 0.22~22               | ✓        | <br>APA-AP |
|                              |                                                                                     | 2525/6060           | 3.0                     |            |     |     |    |    |    |     | 0.22~22               | ✓        |                                                                                                 |
|                              |                                                                                     | 2525/6060           | 5.4                     |            |     |     |    |    |    |     | 1.0~4.7               | ✓        |                                                                                                 |
|                              |                                                                                     | 3030/7070           | 5.4                     |            |     |     |    |    |    |     | 1.0~100               | ✓        |                                                                                                 |
|                              |                                                                                     | 4040/100100         | 4.0/5.4                 |            |     |     |    |    |    |     | 1.0~100               | ✓        |                                                                                                 |

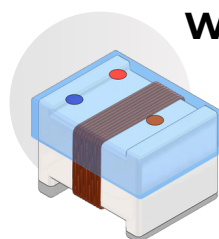
# Inductor Solution

## Product Line Up

**Multilayer  
MCI series**



**Wire-wound  
WCI series**



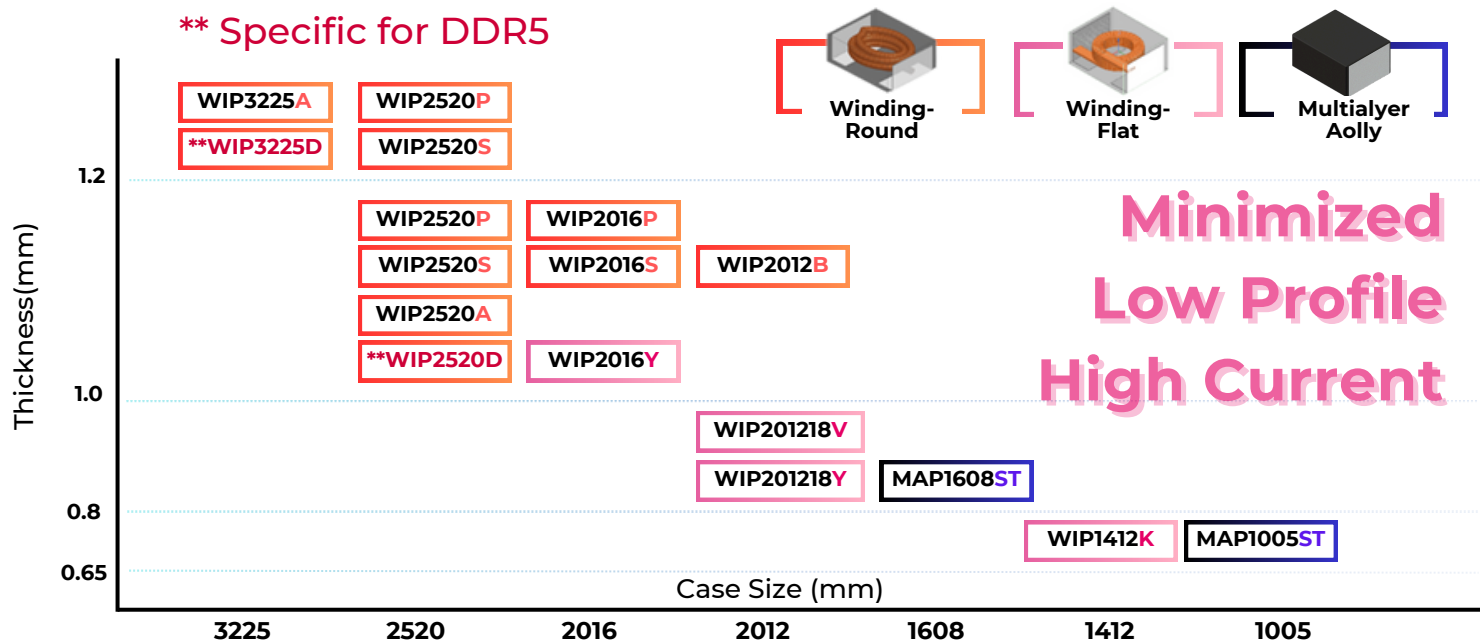
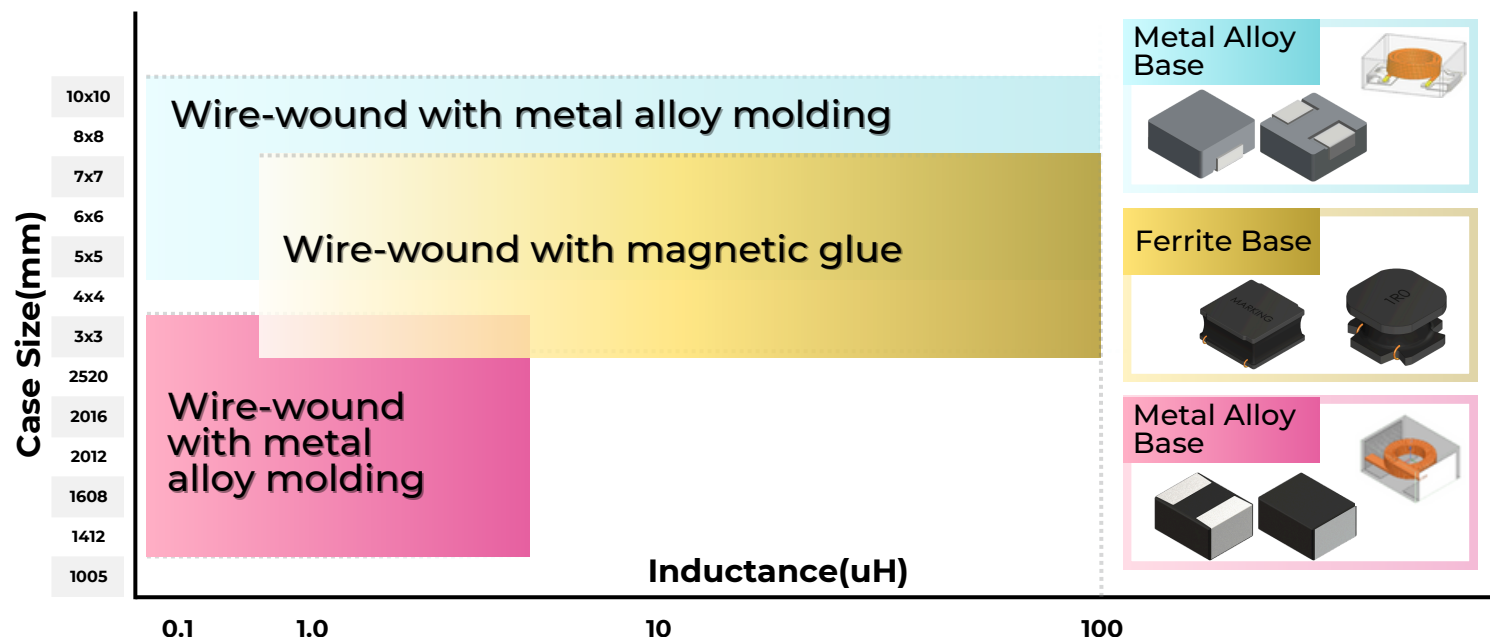
**Automotive grade (AEC-Q200)**

| Category   | Part Number Series                                                                               | Feature    | Size Code (inch/mm) | Inductance Range (H) |      |            |      |      |      | Rated Current (A) |     |      |               |     |
|------------|--------------------------------------------------------------------------------------------------|------------|---------------------|----------------------|------|------------|------|------|------|-------------------|-----|------|---------------|-----|
|            |                                                                                                  |            |                     | 0.1n                 | 1.0n | 10n        | 100n | 1.0u | 10u  | 10m               | 50m | 100m | 200m          | 1.0 |
| Multilayer | MCI0603TG                                                                                        | Standard Q | 0201/0603           | 0.3n                 | -    | 39n        |      |      |      |                   |     |      | 120mA - 850mA |     |
|            | MCI0603TM                                                                                        | High Q     | 0201/0603           | 0.6n                 | -    | 75n        |      |      |      |                   |     |      | 100mA - 850mA |     |
|            | MCI1005HQ                                                                                        | Standard Q | 0402/1005           | 0.3n                 | -    | 150n       |      |      |      |                   |     |      | 140mA - 1.0mA |     |
|            | MCI1608HQ                                                                                        | Standard Q | 0603/1608           |                      | 1.0n | -          | 470n |      |      |                   |     |      | 150mA - 1.0mA |     |
|            | MCI0603MZ     | High Q     | 0201/0603           | 0.6n                 | -    | 18n        |      |      |      |                   |     |      | 200mA - 850mA |     |
|            | MCI1005HZ/HH  | Standard Q | 0402/1005           | 0.3n                 | -    | 100n       |      |      |      |                   |     |      | 200mA - 1.0A  |     |
|            | MCI1608HH     | Standard Q | 0603/1608           |                      | 1.0n | -          | 120n |      |      |                   |     |      | 300mA - 1.0A  |     |
| Wire-wound | WCI1005CP                                                                                        | Standard Q | 0402/1005           |                      | 1.0n | -          | 160n |      |      |                   |     |      | 30mA - 1.36A  |     |
|            | WCI1608CP                                                                                        | Standard Q | 0603/1608           |                      | 1.6n | -          | 470n |      |      |                   |     |      | 80mA - 700mA  |     |
|            | WCI1608HQ                                                                                        | High Q     | 0603/1608           |                      | 1.8n | -          | 390n |      |      |                   |     |      | 170mA - 2.1A  |     |
|            | WCI2012CP                                                                                        | Standard Q | 0805/2012           |                      | 2.2n | -          | 1.0u |      |      |                   |     |      | 170mA - 600mA |     |
|            | WCI2520HQ                                                                                        | High Q     | 0805/2012           |                      | 2.5n | -          | 51n  |      |      |                   |     |      | 1.0A - 1.6A   |     |
|            | WCI2520CP                                                                                        | Standard Q | 1008/2520           |                      |      |            | 10n  | -    | 15u  |                   |     |      | 120mA - 1.0A  |     |
|            | WCI2520HQ                                                                                        | High Q     | 1008/2520           |                      |      | 3.0n - 33n |      |      |      |                   |     |      | 900mA - 1.6A  |     |
|            | WCI3225CG                                                                                        | Standard Q | 1210/3225           |                      |      | 4.7n       | -    | 3.3u |      |                   |     |      | 150mA - 600mA |     |
|            | WCI4532CP                                                                                        | Standard Q | 1812/4532           |                      |      |            | 82n  | -    | 4.7u |                   |     |      | 300mA - 1.5A  |     |
|            | WCA1005CP     | Standard Q | 0402/1005           |                      | 1.0n | -          | 120n |      |      |                   |     |      | 50mA - 1.36A  |     |
|            | WCA1608CP     | Standard Q | 0603/1608           |                      | 1.6n | -          | 470n |      |      |                   |     |      | 80mA - 700mA  |     |
|            | WCA2012CP     | Standard Q | 0805/2012           |                      | 2.2n | -          | 1.5u |      |      |                   |     |      | 170mA - 600mA |     |
|            | WCA2520CP     | Standard Q | 1008/2520           |                      |      |            | 10n  | -    | 15u  |                   |     |      | 120mA - 1.0mA |     |
|            | WCA3225CG     | Standard Q | 1210/3225           |                      |      | 4.7n       | -    | 3.3u |      |                   |     |      | 150mA - 600mA |     |
|            | WCA4532CP     | Standard Q | 1812/4532           |                      |      |            | 82n  | -    | 1.2u |                   |     |      | 480mA - 1.5A  |     |



# Mini Metal Molding Power Inductor

## Competitive Product Series



### Innovation Process :

- Magnetic Paste & Slury
- Excellent Product Efficiency

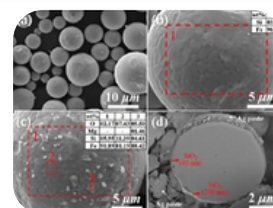


### Color : ( by insulting paste)

- Mysterious Black
- Body Protection

### Body Material :

- High Density , Low loss
- Iron base, Alloy compound



### L Type Electrode :

- Avoid to contact with case

# INPAQ Integrated Component Solution

## Over Voltage Protection

INPAQ's **ESD Suppressor** product line offers a wide range of devices to suit the most of applications in the market with ESD level up to **15KV** and parasitic capacitances as low as **0.05pF**.

| Structure             | Series                                                  | Description                                                          |
|-----------------------|---------------------------------------------------------|----------------------------------------------------------------------|
| <b>ESD Suppressor</b> | <b>Thick Film</b><br>EGA<br>EGA AM<br>CGA<br>CES<br>TVU | Dielectric discharge:<br>Use the ESD Guard layer to form a jump path |
|                       | <b>Thin Film</b><br>TFE<br>TFE AM<br>TLE<br>TUE         | Air discharge:<br>Use an air chamber (Air gap) to form a jump path   |

INPAQ's **Multilayer Varistor** special coating technology provides good reliability and solderability.

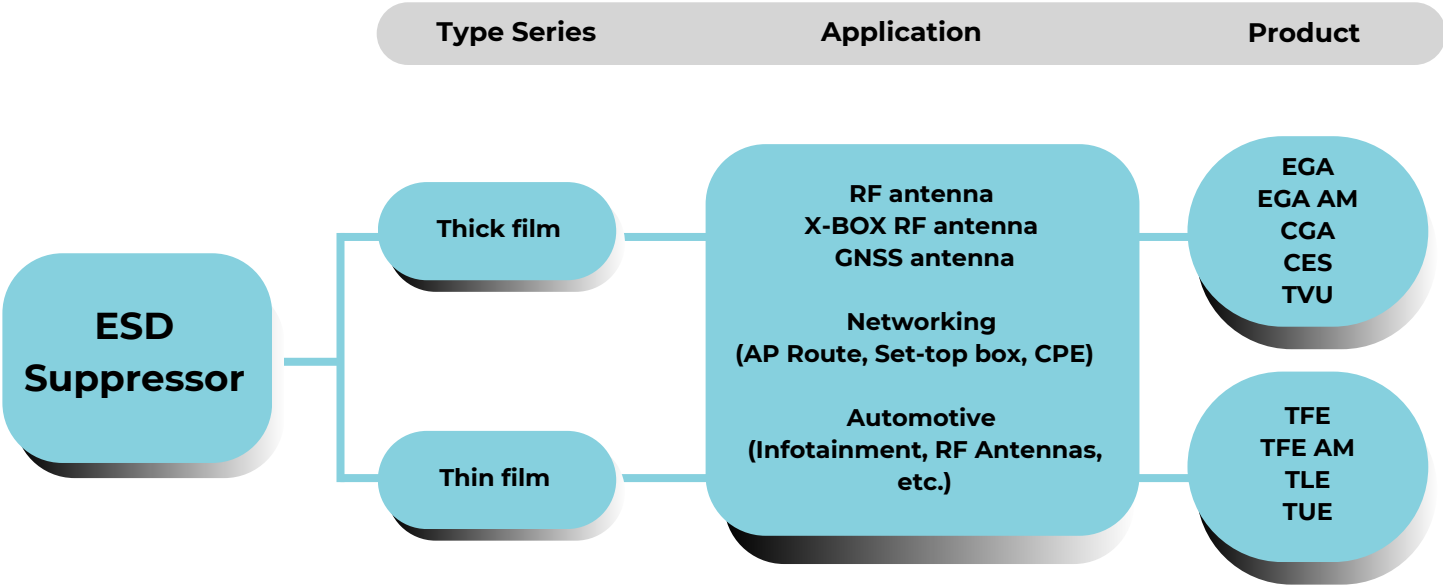
Lead free plating termination provided good solderability characteristic.

Insulator over coat keeps excellent low and stable leakage current.

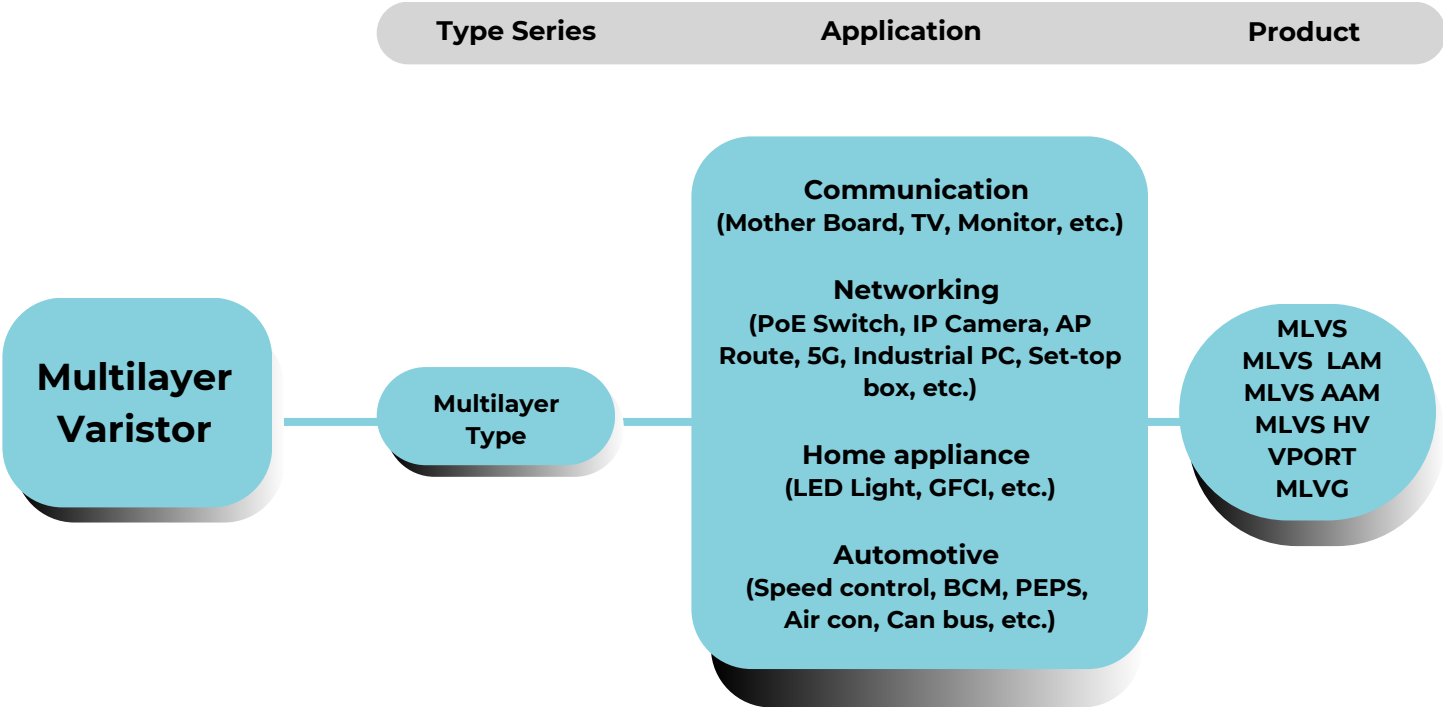
| Structure         | Series                                  | Description                                                                                                                                                          |
|-------------------|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Multilayer</b> | MLVS<br>MLVS LAM<br>MLVS AAM<br>MLVS HV | The <b>varistor</b> body structure consists of a matrix of conductive ZNO grains separated by grain boundaries providing P-N junction semiconductor characteristics. |
|                   | VPORT<br>MLVG                           |                                                                                                                                                                      |

# Over Voltage Protection

## ESD Suppressor



## Multilayer Varistor



# Over Voltage Protection

## Process & Package

| Product           | Process    | Series | Feature                                                                                                                                                                                                                                 |
|-------------------|------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ESD<br>Suppressor | Thick film | EGA    | <ul style="list-style-type: none"><li>EIA 0201~0603 , Array 1206</li><li>Low capacitance (0.2 pF typical)</li></ul>                                                                                                                     |
|                   |            | EGA AM | <ul style="list-style-type: none"><li>EIA 0402/0603</li><li>Low capacitance (0.2 pF typical)</li><li>Automotive grade (AEC-Q200) </li></ul>          |
|                   |            | CGA    | <ul style="list-style-type: none"><li>EIA 0201~0603</li><li>Low capacitance (0.2 pF typical)</li></ul>                                                                                                                                  |
|                   |            | CES    | <ul style="list-style-type: none"><li>EIA 0201/0402</li><li>Ultra low capacitance (0.1 pF typical)</li></ul>                                                                                                                            |
|                   |            | TVU    | <ul style="list-style-type: none"><li>EIA Array 2510</li><li>Low capacitance (0.2 pF typical)</li></ul>                                                                                                                                 |
|                   | Thin film  | TFE    | <ul style="list-style-type: none"><li>EIA 0201/0402</li><li>Ultra low capacitance (0.05 pF typical)</li></ul>                                                                                                                           |
|                   |            | TFE AM | <ul style="list-style-type: none"><li>EIA 0201/0402</li><li>Ultra low capacitance (0.05 pF typical)</li><li>Automotive grade (AEC-Q200) </li></ul> |
|                   |            | TLE    | <ul style="list-style-type: none"><li>EIA 0201/0402</li><li>Ultra low capacitance (0.05 pF typical)</li></ul>                                                                                                                           |
|                   |            | TUE    | <ul style="list-style-type: none"><li>EIA 0201/0402</li><li>Ultra low trigger voltage</li><li>Ultra low capacitance (0.07 pF typical)</li></ul>                                                                                         |



# Over Voltage Protection

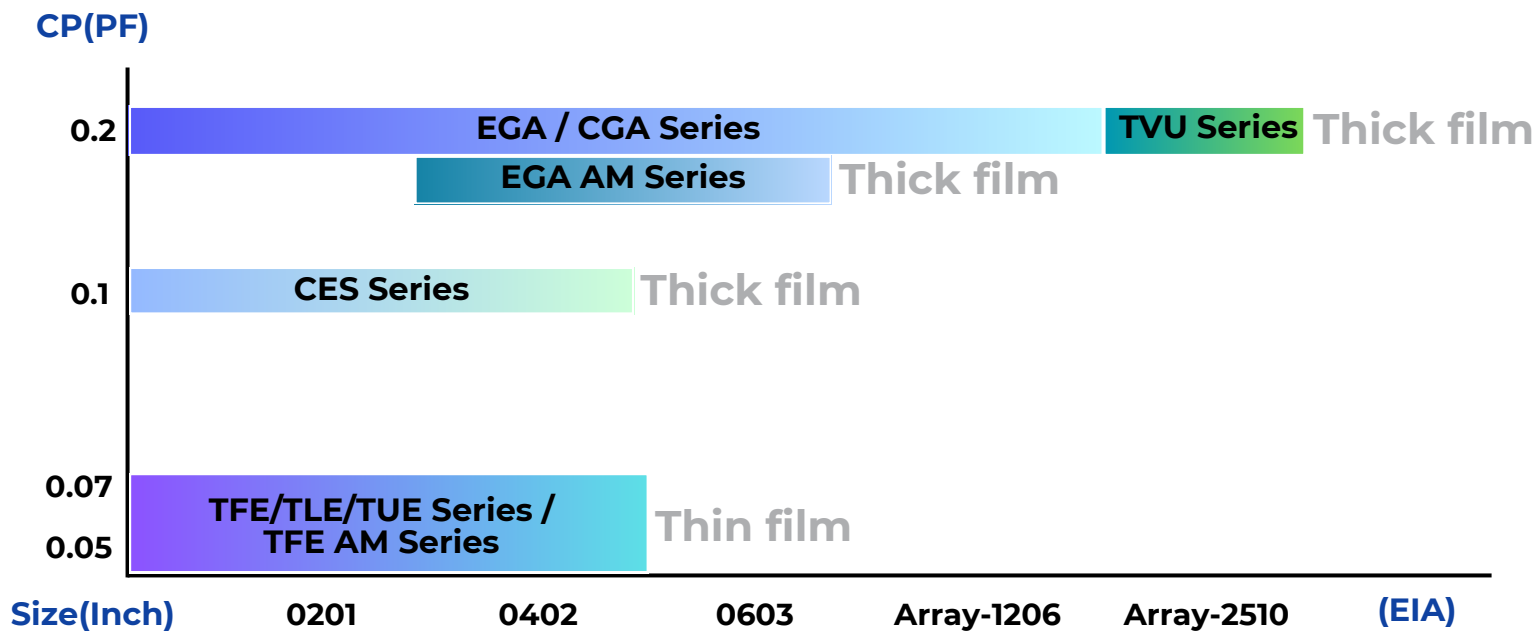
## Process & Package

| Product                | Process    | Series               | Feature                                                                                                                                                                                                                                                                      |
|------------------------|------------|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Multilayer<br>Varistor | Multilayer | MLVS                 | <ul style="list-style-type: none"><li>• EIA 0201~2220</li><li>• General surge / Hight Surge</li><li>• Lead free plating termination provided good solderability characteristic</li></ul>                                                                                     |
|                        |            | MLVS LAM<br>MLVS AAM | <ul style="list-style-type: none"><li>• EIA 0402~2220</li><li>• Lead free plating termination provided good solderability characteristic</li><li>• Automotive grade (AEC-Q200) </li></ul> |
|                        |            | MLVS HV              | <ul style="list-style-type: none"><li>• EIA 0604/0806</li><li>• Hight working voltage</li><li>• Lead free plating termination provided good solderability characteristic</li><li>• Meet UL/cUL Certification</li></ul>                                                       |
|                        |            | VPORT                | <ul style="list-style-type: none"><li>• EIA 0402/0603</li><li>• Working voltage 5V / 12V</li><li>• Lead free plating termination provided good solderability characteristic</li></ul>                                                                                        |
|                        |            | MLVG                 | <ul style="list-style-type: none"><li>• EIA 0402/0603</li><li>• Low capacitance (0.5 pF typical)</li><li>• Lead free plating termination provided good solderability characteristic</li></ul>                                                                                |

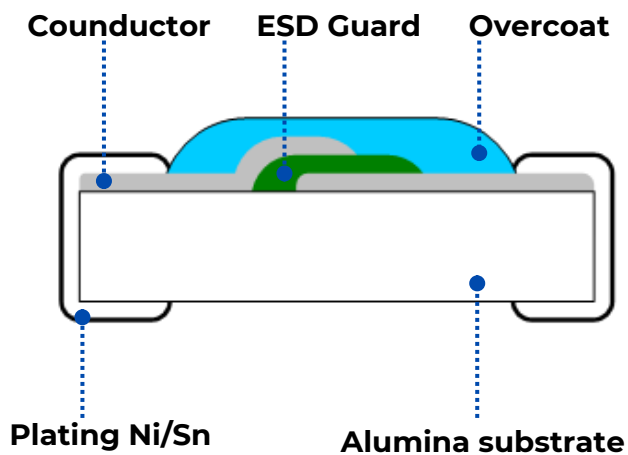
# Over Voltage Protection

## Competitive Product Series

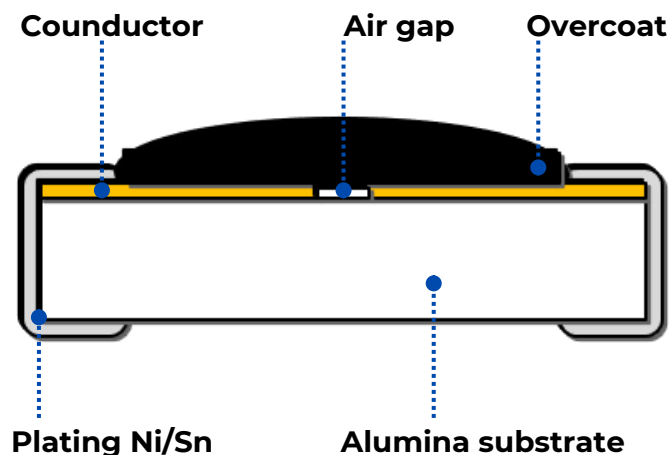
### ESD Suppressor



#### Thick film Structure



#### Thin film Structure



# Over Voltage Protection

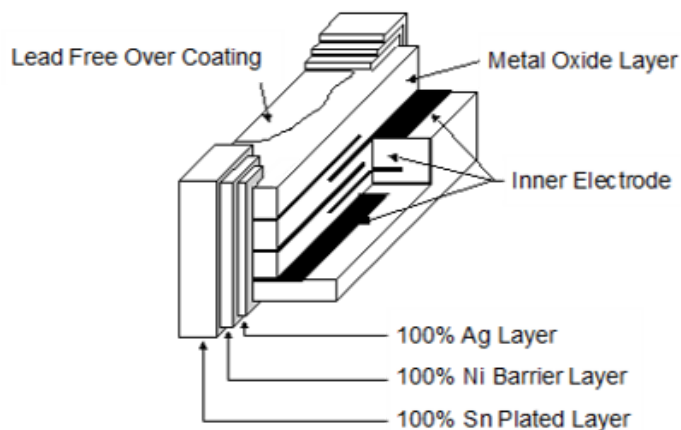
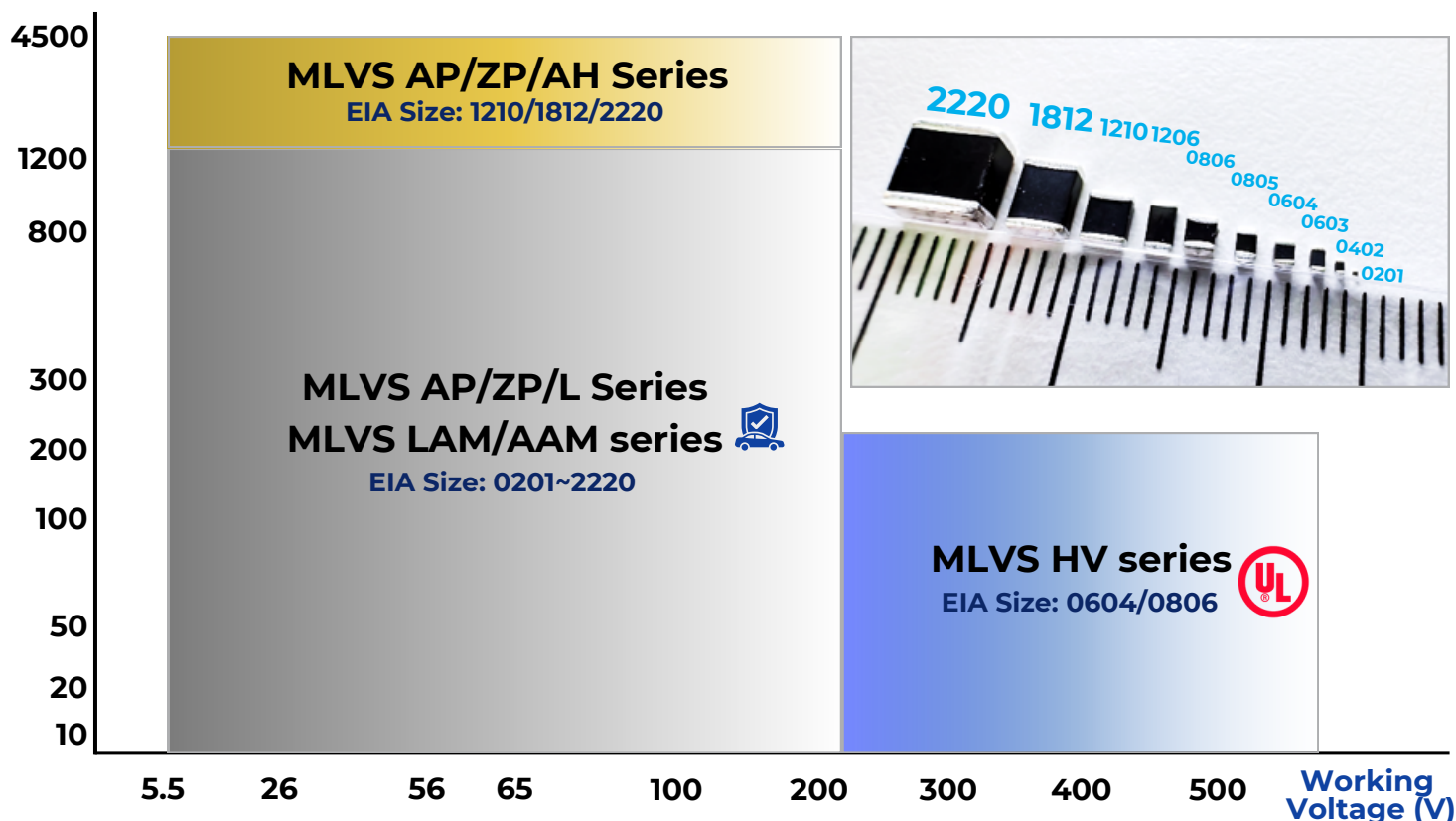
## Competitive Product Series

### Multilayer Varistor

Surge(A)



Automotive grade (AEC-Q200)



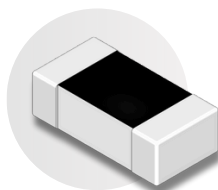
#### Lead Free Over coating



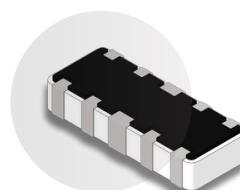
- Special coating technology (Patent)
- Provides good reliability and solderability

# Over Voltage Protection

## ESD Suppressor - Product Line Up



EGA CGA CES  
TFE TLE TUE  
EGA AM  
TFE AM



TVU



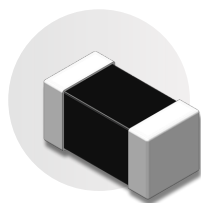
Automotive grade (AEC-Q200)

| Series | Structure  | EIA  |      |      |            |            | AEC-Q200 | Rated Voltage (V) |   |   |    |    |    |    | Capacitance (PF) |      |      |
|--------|------------|------|------|------|------------|------------|----------|-------------------|---|---|----|----|----|----|------------------|------|------|
|        |            | 0201 | 0402 | 0603 | Array-1206 | Array-2510 |          | 5                 | 6 | 7 | 12 | 15 | 24 | 30 | 0.05             | 0.10 | 0.20 |
| EGA    | Thick film |      |      |      |            |            |          |                   |   |   |    |    |    |    |                  |      |      |
| CGA    |            |      |      |      |            |            |          |                   |   |   |    |    |    |    |                  |      |      |
| CES    |            |      |      |      |            |            |          |                   |   |   |    |    |    |    |                  |      |      |
| TVU    |            |      |      |      |            |            |          |                   |   |   |    |    |    |    |                  |      |      |
| EGA AM |            |      |      |      |            |            |          |                   |   |   |    |    |    |    |                  |      |      |
| TFE    | Thin film  |      |      |      |            |            |          |                   |   |   |    |    |    |    |                  |      |      |
| TLE    |            |      |      |      |            |            |          |                   |   |   |    |    |    |    |                  |      |      |
| TUE    |            |      |      |      |            |            |          |                   |   |   |    |    |    |    |                  |      |      |
| TFE AM |            |      |      |      |            |            |          |                   |   |   |    |    |    |    |                  |      |      |

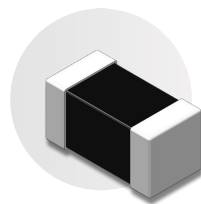


# Over Voltage Protection

## Multilayer Varistor- Product Line Up



MLVS MLVG  
VPORT



MLVS LAM  
MLVS AAM  
MLVS HV



Automotive grade (AEC-Q200)

| Series               | EIA  |      |      |      |      |      |      |      |      |      | AEC-Q200 |
|----------------------|------|------|------|------|------|------|------|------|------|------|----------|
|                      | 0201 | 0402 | 0603 | 0604 | 0805 | 0806 | 1206 | 1210 | 1812 | 2220 |          |
| MLVS                 |      |      |      |      |      |      |      |      |      |      |          |
| MLVS LAM<br>MLVS AAM |      |      |      |      |      |      |      |      |      |      |          |
| MLVS HV              |      |      |      |      |      |      |      |      |      |      |          |
| VPORT                |      |      |      |      |      |      |      |      |      |      |          |
| MLVG                 |      |      |      |      |      |      |      |      |      |      |          |

| Series               | Working voltage (V) |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |     |     |     |     |  |  |
|----------------------|---------------------|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|--|--|
|                      | 5.5                 | 7 | 9 | 11 | 12 | 14 | 17 | 18 | 20 | 22 | 24 | 26 | 29 | 30 | 31 | 36 | 38 | 42 | 45 | 48 | 56 | 60 | 63 | 65 | 85 | 100 | 200 | 225 | 320 | 385 |  |  |
| MLVS                 |                     |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |     |     |     |     |  |  |
| MLVS LAM<br>MLVS AAM |                     |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |     |     |     |     |  |  |
| MLVS HV              |                     |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |     |     |     |     |  |  |
| VPORT                |                     |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |     |     |     |     |  |  |
| MLVG                 |                     |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |     |     |     |     |  |  |

| Series               | Peak current (A) |    |    |    |    |     |     |     |     |     |     |     |     |      |      |      |      |  |
|----------------------|------------------|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|--|
|                      | 5                | 10 | 20 | 30 | 50 | 100 | 160 | 200 | 300 | 400 | 450 | 500 | 800 | 1200 | 4000 | 4500 | 5000 |  |
| MLVS                 |                  |    |    |    |    |     |     |     |     |     |     |     |     |      |      |      |      |  |
| MLVS LAM<br>MLVS AAM |                  |    |    |    |    |     |     |     |     |     |     |     |     |      |      |      |      |  |
| MLVS HV              |                  |    |    |    |    |     |     |     |     |     |     |     |     |      |      |      |      |  |
| VPORT                |                  |    |    |    |    |     |     |     |     |     |     |     |     |      |      |      |      |  |
| MLVG                 |                  |    |    |    |    |     |     |     |     |     |     |     |     |      |      |      |      |  |

# INPAQ Integrated Component Solution

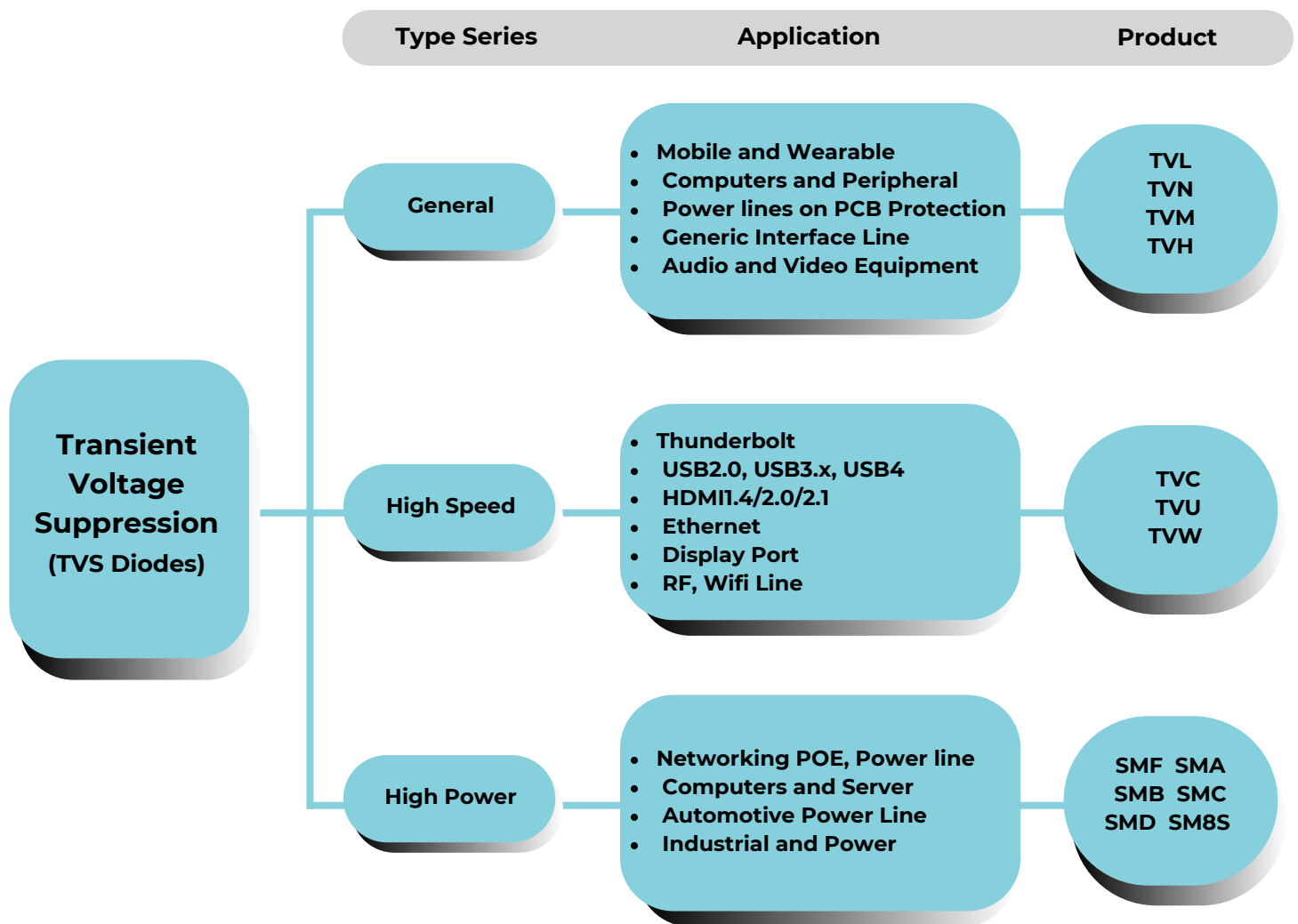
## Over Voltage Protection

INPAQ's **Transient Voltage Suppression (TVS)** focused on provide **ESD** and **EOS protection**. We provide a wide range of products focused on three application areas.

| Product                                    | Type              | Series                   | Description                                                                                                                                                                                                                        |
|--------------------------------------------|-------------------|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Transient Voltage Suppression (TVS)</b> | <b>General</b>    | TVL/TVN/TVM/TVH          | TVS diode products are designed to protect power/control line or low speed interfaces on electronic equipment against ESD (Electrostatic Discharge)<br><b>IEC 61000-4-2 and EOS (Electrical Over Stress 8/20μs) IEC 61000-4-5.</b> |
|                                            | <b>High Speed</b> | TVC/TVU/TVW              | TVS diode products are designed to protect high speed interfaces on electronic equipment against ESD (Electrostatic Discharge)<br><b>IEC 61000-4-2. Featuring super/ultra-low capacitance.</b>                                     |
|                                            | <b>High Power</b> | SMF/SMA/SMB/SMC/SMD/SM8S | High Power TVS diode products are designed to protect electronic circuits against <b>EOS (Electrical Over Stress 10/1000μs)</b> , such as from lightning and inductive load switching.                                             |

# Over Voltage Protection

## Transient Voltage Suppression (TVS Diodes)

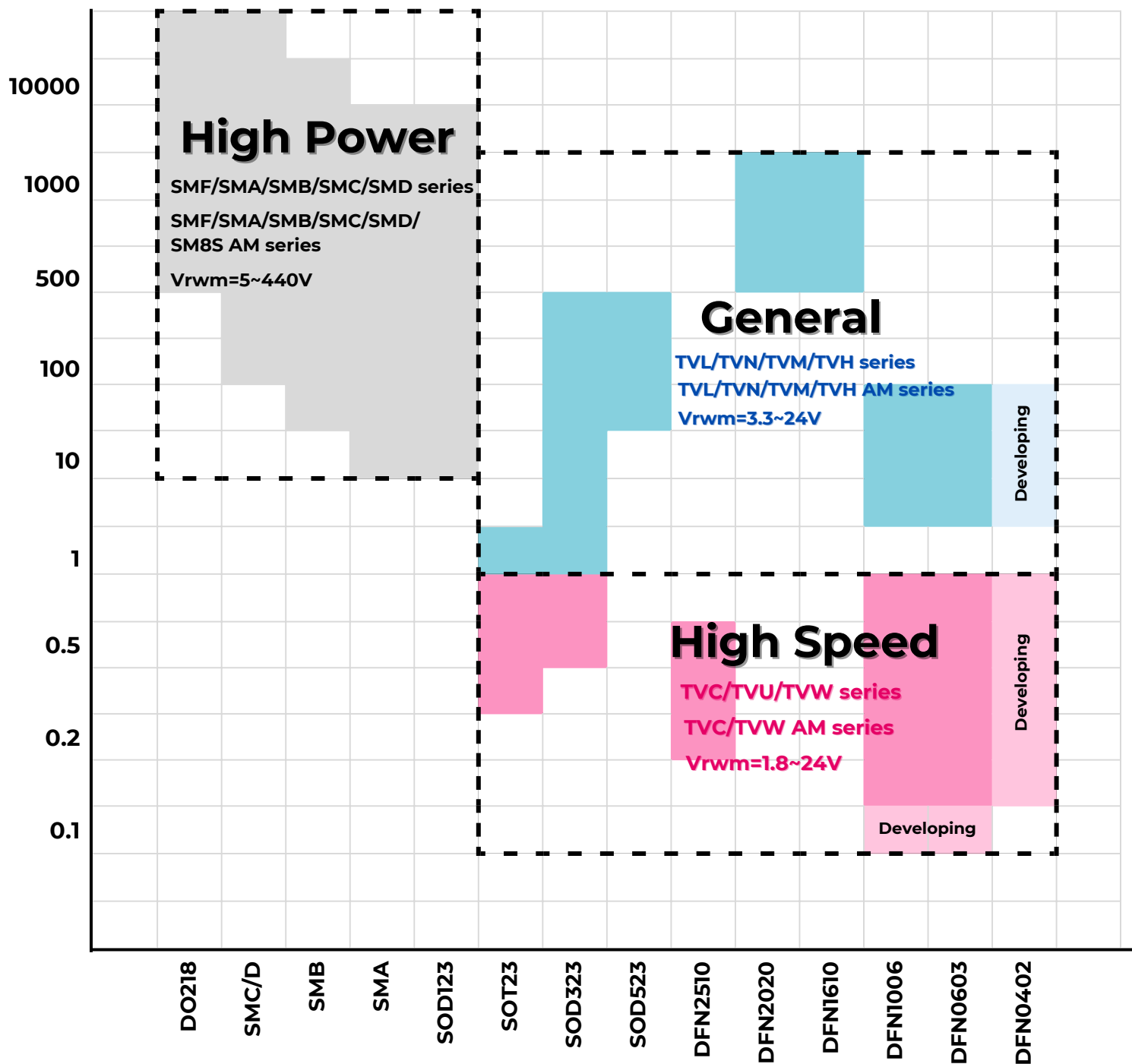


# Over Voltage Protection

## Competitive Product Series

### Transient Voltage Suppression (TVS Diodes)

Capacitance(pF)

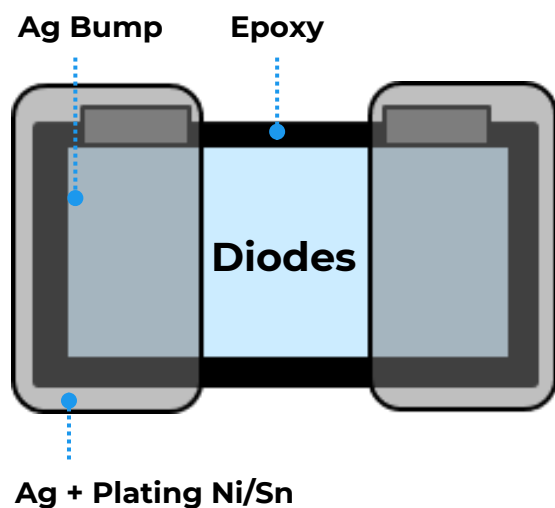


# Over Voltage Protection

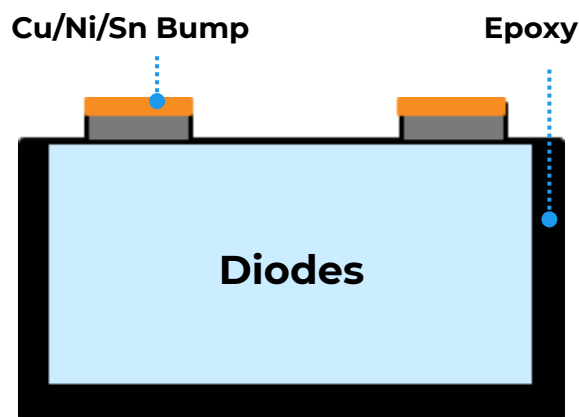
## Competitive Product Series

### Transient Voltage Suppression (TVS Diodes)

#### End-Cap Type



#### DFN Type



#### Chip Scale Package(CSP) Package

- Wafer design ability
- Excellent solderability
- In-house assembly
- High production capacity
- Stable process
- 0201 package size



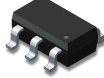
# Over Voltage Protection

## TVS Diodes - Product Line Up

### ESD TVS Diodes



Automotive grade (AEC-Q101)

| Appearance                                                                          | Size Code<br>(inch/mm) | Voltage |     |     |     |   |   |    |    |    |    | AEC-Q101                                                                              |
|-------------------------------------------------------------------------------------|------------------------|---------|-----|-----|-----|---|---|----|----|----|----|---------------------------------------------------------------------------------------|
|                                                                                     |                        | (V)     |     |     |     |   |   |    |    |    |    |                                                                                       |
|                                                                                     |                        | 1.0     | 1.5 | 3.3 | 4.5 | 5 | 7 | 15 | 20 | 25 | 30 |                                                                                       |
|    | CSP0201                |         |     |     |     |   |   |    |    |    |    |                                                                                       |
|    | DFN0603                |         |     |     |     |   |   |    |    |    |    |                                                                                       |
|                                                                                     | DFN0603                |         |     |     |     |   |   |    |    |    |    |    |
|                                                                                     | DFN1006                |         |     |     |     |   |   |    |    |    |    |                                                                                       |
|                                                                                     | DFN1006                |         |     |     |     |   |   |    |    |    |    |    |
|                                                                                     | DFN1610                |         |     |     |     |   |   |    |    |    |    |                                                                                       |
|                                                                                     | DFN2020                |         |     |     |     |   |   |    |    |    |    |                                                                                       |
|  | DFN2510                |         |     |     |     |   |   |    |    |    |    |                                                                                       |
|                                                                                     | DFN2510                |         |     |     |     |   |   |    |    |    |    |  |
|  | SOD523                 |         |     |     |     |   |   |    |    |    |    |                                                                                       |
|                                                                                     | SOD523                 |         |     |     |     |   |   |    |    |    |    |                                                                                       |
|  | SOD323                 |         |     |     |     |   |   |    |    |    |    |                                                                                       |
|                                                                                     | SOD323                 |         |     |     |     |   |   |    |    |    |    |                                                                                       |
|  | SOT23                  |         |     |     |     |   |   |    |    |    |    |                                                                                       |
|  | SOT23                  |         |     |     |     |   |   |    |    |    |    |  |
|  | SOT143                 |         |     |     |     |   |   |    |    |    |    |                                                                                       |
|  | SOT523                 |         |     |     |     |   |   |    |    |    |    |                                                                                       |

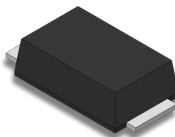
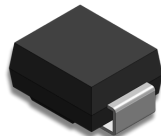
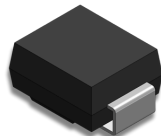
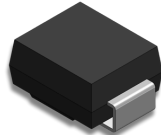
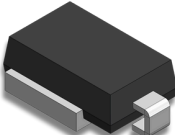
# Over Voltage Protection

## TVS Diodes - Product Line Up

### Power TVS Diodes



Automotive grade (AEC-Q101)

| Appearance                                                                         | Size Code<br>(inch/mm) | Voltage |    |     |     |     |     |     | Peak Power | AEC-Q101                                                                              | Series     |
|------------------------------------------------------------------------------------|------------------------|---------|----|-----|-----|-----|-----|-----|------------|---------------------------------------------------------------------------------------|------------|
|                                                                                    |                        | (V)     |    |     |     |     |     |     |            |                                                                                       |            |
|                                                                                    |                        | 5       | 50 | 100 | 200 | 300 | 400 | 440 | (V)        |                                                                                       |            |
|    | SOD123                 |         |    |     |     |     |     |     | 200        |                                                                                       | SMFJ-T     |
|                                                                                    | SOD123                 |         |    |     |     |     |     |     | 200        |    | SMFJ-AM    |
|                                                                                    | SOD123                 |         |    |     |     |     |     |     | 400        |                                                                                       | SM4FJ-T    |
|                                                                                    | SOD123                 |         |    |     |     |     |     |     | 400        |    | SM4FJ-AM   |
|   | SMA                    |         |    |     |     |     |     |     | 400        |                                                                                       | SMAL-T     |
|                                                                                    | SMA                    |         |    |     |     |     |     |     | 400        |   | SMAJ-AM    |
|                                                                                    | SMA                    |         |    |     |     |     |     |     | 600        |                                                                                       | SMA6L-T    |
|  | SMB                    |         |    |     |     |     |     |     | 600        |                                                                                       | SMBL-T     |
|                                                                                    | SMB                    |         |    |     |     |     |     |     | 600        |  | SMBJ-AM    |
|                                                                                    | SMB                    |         |    |     |     |     |     |     | 1000       |                                                                                       | 1.0SMBL-T  |
|                                                                                    | SMB                    |         |    |     |     |     |     |     | 1500       |                                                                                       | 1.5SMBL-T  |
|  | SMC                    |         |    |     |     |     |     |     | 1500       |                                                                                       | SMCL-T     |
|                                                                                    | SMC                    |         |    |     |     |     |     |     | 1500       |  | SMCJ-AM    |
|                                                                                    | SMD                    |         |    |     |     |     |     |     | 3000       |                                                                                       | SMDL-T     |
|                                                                                    | SMD                    |         |    |     |     |     |     |     | 3000       |  | SMDJ-AM    |
|                                                                                    | SMD                    |         |    |     |     |     |     |     | 5000       |                                                                                       | 5.0SMDL-T  |
|                                                                                    | SMD                    |         |    |     |     |     |     |     | 5000       |  | 5.0SMDJ-AM |
|  | DO218                  |         |    |     |     |     |     |     | 6600       |  | SM8S-AM    |

# INPAQ Integrated Component Solution

## EMI Suppression Filter

Electronic devices generate electromagnetic interferences, which can affect the proper functioning of electronic devices and systems.

The coming EMI / RFI noise interference issues encountered in several applications, **INPAQ** provides whole range of **Common-Mode Filter** and **Multilayer Chip Bead** Series.



Automotive grade (AEC-Q200)

| Structure         | Series | Description                                                                                                                                                                                                                                                             |
|-------------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Common mode Choke | MCM    | Powerful components with composite co-fired materials to solve EMI problem for high speed differential signal transmission line as USB, LVDS, HDMI, MIPI and Ethernet without distortion to high speed signal transmission.                                             |
|                   | MCM_W  |                                                                                                                                                                                                                                                                         |
|                   | MCA    | Powerful components with composite co-fired materials to solve EMI problem for high speed differential signal transmission line as USB and Ethernet without distortion to high speed signal transmission.                                                               |
|                   | HCM    | Ultra High Speed Chip Common Mode Filter, HCM series adopts internally unique multilayer ceramic/ferrite co-firing technologies and higher cut-off frequency design for miniaturized size of EMI filter product development. for higher speed I/O of tablet PC/NB & MB. |
|                   | SCM    | Powerful components with high common mode impedance at high frequency perform outstanding noise suppression, also realize miniature size and low profile.                                                                                                               |
| Wire-wound        | SCA    |                                                                                                                                                                                                                                                                         |
|                   |        |                                                                                                                                                                                                                                                                         |

# INPAQ Integrated Component Solution

## EMI Suppression Filter

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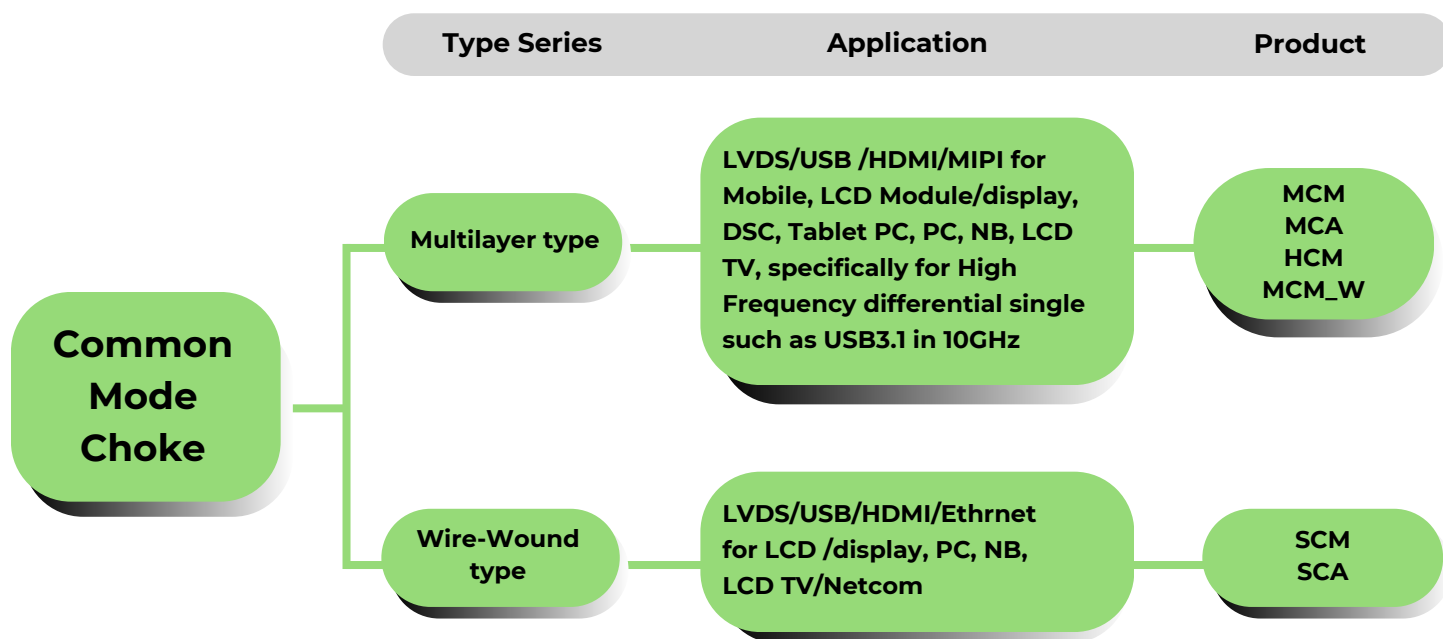


**Automotive grade (AEC-Q200)**

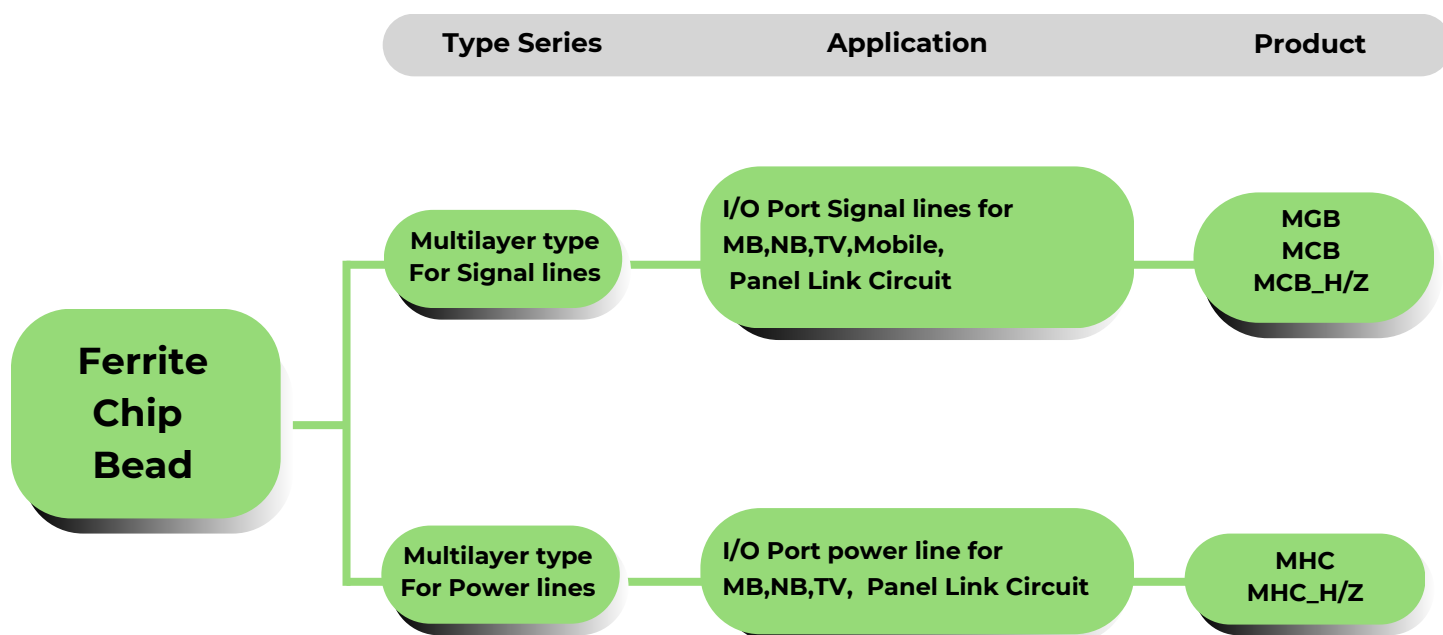
| Structure           | Series  | Description                                                                                                                                                                                                                                                                                                                                                                               |
|---------------------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Ferrite Bead</b> | MCB     | Filtering between analog and digital circuitry, clock generation circuitry, I/O interconnects, isolation between RF noisy circuits and logic devices susceptible to functional degradation, power supply filtering to prevent conducted RF energy from corrupting the power generation circuitry, high frequency EMI prevention of computer, printers, VCRs, TVs and portable telephones. |
|                     | MCB_H/Z |                                                                                                                                                                                                                                                                                                                                                                                           |
|                     | MHC     | Combination of high frequency noise suppression with capability of handling high current The current rating up to 8 Amps with low DCR                                                                                                                                                                                                                                                     |
|                     | MHC_H/Z |                                                                                                                                                                                                                                                                                                                                                                                           |
|                     | MGB     | Effectively filtering capability over a wide range of frequency (Several MHz to GHz). RF and wireless communication, information technology equipment which includes computer, laptop, telecommunications, radar detectors, automotive electronics, cellular phones, pagers, audio equipment, PDAs, keyless remote system and Navigator systems.                                          |

# EMI Suppression Filter

## Common Mode Choke

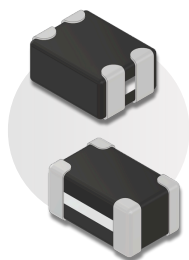


## Ferrite Chip Bead



# EMI Suppression Filter

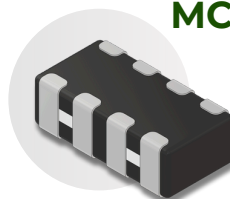
## Common Mode Choke- Product Line Up



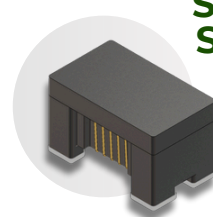
**MCM**  
**MCM-W**



**HCM**



**MCA**



**SCM**  
**SCA**



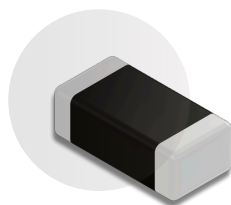
Automotive grade (AEC-Q200)

| Category   | Part Number Series | Feature               | Size (EIAJ) | Size (EIA) | Impedance Range (Ω)@100M | Rated Current(A) | AEC-Q200 |
|------------|--------------------|-----------------------|-------------|------------|--------------------------|------------------|----------|
| Multialyer | MCM                | High Speed            | 1012        | 0405       | 67~120                   | 300mA            |          |
|            |                    |                       | 2012        | 0805       | 67~220                   | 300mA~400mA      |          |
|            |                    |                       | 3216        | 1206       | 90~120                   | 500mA            |          |
|            | MCM-W              | Auto type             | 1012        | 0405       | 67~120                   | 300mA            |          |
|            |                    |                       | 2012        | 0805       | 67~220                   | 300mA~400mA      |          |
|            | HCM                | Ultra High Speed      | 0806        | 03025      | 12~28                    | 130mA~160mA      |          |
|            |                    |                       | 1012        | 0405       | 15~90                    | 100mA            |          |
|            |                    |                       | 2012        | 0805       | 50~120                   | 100mA~200mA      |          |
|            | MCA                | High Speed Array type | 2012        | 0805       | 90~120                   | 300mA~400mA      |          |
|            |                    |                       | 3216        | 1206       | 90~180                   | 300mA~400mA      |          |
| Wire wound | SCM                | High Speed            | 2012        | 0805       | 67~750                   | 220mA~400mA      |          |
|            | SCA                | Auto type             | 2012        | 0805       | 67~750                   | 220mA~400mA      |          |

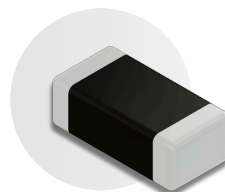


# EMI Suppression Filter

## Ferrite Chip Bead - Product Line Up



MCB-S  
MCB-S/B  
MCB-P  
MCB-H



MCB\_H/Z  
MCB-H\_H/Z

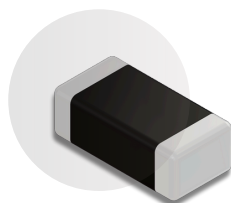


Automotive grade (AEC-Q200)

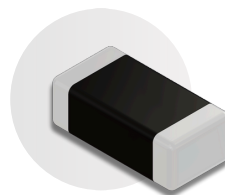
| Part Number Series | Feature                        | Size (EIAJ) | Size (EIA) | Impedance Range ( $\Omega$ )@100M | Rated Current(A) | AEC-Q200 |
|--------------------|--------------------------------|-------------|------------|-----------------------------------|------------------|----------|
| MGB-S              | Signal lines type (GHz band)   | 1005        | 0402       | 600~1800                          | 200mA~300mA      |          |
| MCB-S/B            | Signal lines type (Standard)   | 1005        | 0402       | 10~1800                           | 150mA~800mA      |          |
|                    |                                | 1608        | 0603       | 10~2500                           | 200mA~800mA      |          |
|                    |                                | 2012        | 0805       | 30~3000                           | 300mA~800mA      |          |
|                    |                                | 3216        | 1206       | 50~2000                           | 200mA~800mA      |          |
|                    |                                | 3225        | 1210       | 60~90                             | 800mA            |          |
|                    |                                | 4516        | 1806       | 80                                | 800mA            |          |
| MCB-P              | Signal lines type (Low DCR)    | 1005        | 0402       | 10~70                             | 780mA~1800mA     |          |
| MCB-H              | Signal lines type (High Speed) | 1005        | 0402       | 22~120                            | 300mA            |          |
|                    |                                | 1608        | 0603       | 20~1000                           | 200mA~500mA      |          |
|                    |                                | 2012        | 0805       | 120~600                           | 200mA            |          |
| MCB_H/Z            | Signal lines type (Standard)   | 1005        | 0402       | 70~1800                           | 200mA~600mA      |          |
|                    |                                | 1608        | 0603       | 120~2500                          | 150mA~800mA      |          |
|                    |                                | 2012        | 0805       | 120~2000                          | 200mA~800mA      |          |
|                    |                                | 3216        | 1206       | 1500~200                          | 500mA~700mA      |          |
| MCB-H_H/Z          | Signal lines type (High Speed) | 1005        | 0402       | 75~220                            | 300mA            |          |
|                    |                                | 1608        | 0603       | 20~1000                           | 200mA~800mA      |          |
|                    |                                | 2012        | 0805       | 2200                              | 200mA            |          |

# EMI Suppression Filter

## Ferrite Chip Bead - Product Line Up



MHC-S  
MHC-P



MHC\_H/Z  
MHC-P\_H/Z



Automotive grade (AEC-Q200)

| Part Number Series | Feature                          | Size (EIAJ) | Size (EIA) | Impedance Range ( $\Omega$ )@100M | Rated Current(A) | AEC-Q200 |
|--------------------|----------------------------------|-------------|------------|-----------------------------------|------------------|----------|
| MHC-S              | Power Lines type (Standard)      | 1005        | 0402       | 10~120                            | 1500mA~3000mA    |          |
|                    |                                  | 1608        | 0603       | 10~1000                           | 800mA~4000mA     |          |
|                    |                                  | 2012        | 0805       | 22~1500                           | 1000mA~6000mA    |          |
|                    |                                  | 3216        | 1206       | 30~1200                           | 1000mA~6000mA    |          |
|                    |                                  | 3225        | 1210       | 60~1000                           | 1500mA~2000mA    |          |
|                    |                                  | 4516        | 1806       | 60~850                            | 1500mA~6000mA    |          |
|                    |                                  | 4532        | 1812       | 120~1300                          | 3000mA~6000mA    |          |
| MHC-P              | Power lines type (Ultra Low DCR) | 1005        | 0402       | 33~600                            | 900mA~3000mA     |          |
|                    |                                  | 1608        | 0603       | 22~1000                           | 1000mA~8000mA    |          |
| MHC_H/Z            | Power lines type (Standard)      | 1005        | 0402       | 10~120                            | 1000mA~2500mA    |          |
|                    |                                  | 1608        | 0603       | 30~1000                           | 800mA~3000mA     |          |
|                    |                                  | 2012        | 0805       | 30~1500                           | 1000mA~4000mA    |          |
|                    |                                  | 3216        | 1206       | 50~600                            | 1500mA~3500mA    |          |
|                    |                                  | 3225        | 1210       | 1000                              | 2000mA           |          |
|                    |                                  | 4516        | 1806       | 60~1000                           | 1500mA~6000mA    |          |
|                    |                                  | 4532        | 1812       | 680                               | 4000mA           |          |
| MHC-P_H/Z          | Power lines type (Ultra Low DCR) | 1608        | 0603       | 26~600                            | 1300mA~6000mA    |          |

# Application Guide

# Mobile Phone



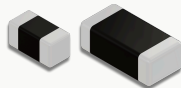
Camera

SD Card

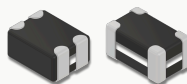
USB

Display

**EMI suppression filter**  
Multilayer chip bead  
**MCB/MHC/MGB Series**



**EMI suppression filter**  
Multilayer common mode choke  
**MCM/HCM Series**



**Over voltage protection**  
ESD TVS  
**TVC/TVW/TVL Series**

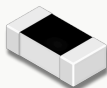


**RF front end**

**RF Inductor**  
Multilayer ceramic RF Inductor  
**MCI Series**



**Over voltage protection**  
ESD Suppressor  
**EGA/TFE Series**



**Wireless Connectivity**

**RF Inductor**  
Multilayer ceramic RF Inductor  
**MCI Series**



**Over voltage protection**  
ESD Suppressor  
**EGA/TFE Series**



**PMIC**

**Power Charge**

**SMD power inductor**  
*Mini* molding power inductor  
**WIP Series**

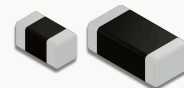


**Application processor**

**Speaker**

**Mircophone**

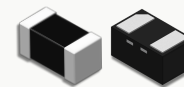
**EMI suppression filter**  
Multilayer chip bead  
**MCB/MHC/MGB Series**



**EMI suppression filter**  
Multilayer common mode choke  
**MCM/HCM Series**



**Over voltage protection**  
ESD TVS  
**TVC/TVW Series**



# Application Guide

# Wearable

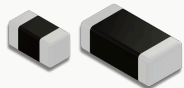


## Camera

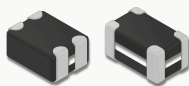
## USB

## Display

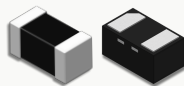
**EMI suppression filter**  
Multilayer chip bead  
**MCB/MHC/MGB Series**



**EMI suppression filter**  
Multilayer common mode choke  
**MCM/HCM Series**



**Over voltage protection**  
ESD TVS  
**TVC/TVW/TVL Series**

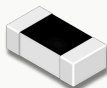


## RF front end

**RF Inductor**  
Multilayer ceramic RF Inductor  
**MCI Series**



**Over voltage protection**  
ESD Suppressor  
**EGA/TFE Series**

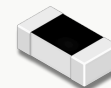


## Wireless Connectivity

**RF Inductor**  
Multilayer ceramic RF Inductor  
**MCI Series**



**Over voltage protection**  
ESD Suppressor  
**EGA/TFE Series**



## PMIC

## Power Charge

**SMD power inductor**  
Mini molding power inductor  
**WIP Series**

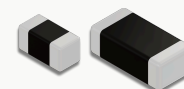


## Application processor

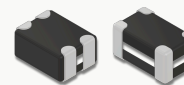
## Speaker

## Mircophone

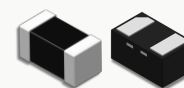
**EMI suppression filter**  
Multilayer chip bead  
**MCB/MHC/MGB Series**



**EMI suppression filter**  
Multilayer common mode choke  
**MCM/HCM Series**



**Over voltage protection**  
ESD TVS  
**TVC/TVW Series**



# Application Guide

# Networking

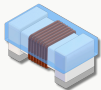


## RF front end

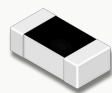
**RF Inductor**  
Multilayer ceramic RF Inductor  
MCI Series



**RF Inductor**  
Wound ceramic RF Inductor  
WCI Series



**Over voltage protection**  
ESD Suppressor  
EGA/TFE Series



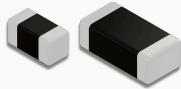
## Main board

## HDMI

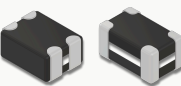
## USB

## LAN

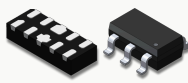
**EMI suppression filter**  
Multilayer chip bead  
MCB/MHC/MGB Series



**EMI suppression filter**  
Multilayer common mode choke  
MCM/HCM Series



**Over voltage protection**  
ESD TVS  
TVC/TVU/TVW Series



**Over voltage protection**  
Multilayer Varistor  
MLVS/VPORT Series



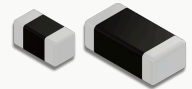
## DC-in Power

**Over voltage protection**  
Power TVS  
SMA/SMB/SMC/SMD Series



## POE

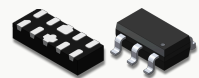
**EMI suppression filter**  
Multilayer chip bead  
MCB/MHC/MGB Series



**EMI suppression filter**  
Multilayer common mode choke  
MCM/HCM Series



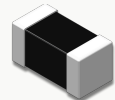
**Over voltage protection**  
ESD TVS  
TVC/TVU/TVW Series



**Over voltage protection**  
Power TVS  
SMA/SMB/SMC/SMD Series



**Over voltage protection**  
Multilayer Varistor  
MLVS/VPORT Series



## DC-DC power

**SMD power inductor**  
*Mini* molding power inductor  
WIP Series



**SMD power inductor**  
Molding power inductor  
AIP Series



# Application Guide

# TV/Monitor



## I/F Tuner

### Wireless Connectivity

#### RF Inductor

Multilayer ceramic RF Inductor  
MCI Series



#### RF Inductor

Wirewound ceramic RF Inductor  
WCI Series



#### RF Inductor

Air coil RF Inductor  
LSP/LSQ Series



#### Over voltage protection

ESD Suppressor  
EGA/TFE Series



## DC-DC power

#### SMD power inductor

Mini molding power inductor  
WIP Series



#### SMD power inductor

Molding power inductor  
AIP Series



#### SMD power inductor

Wirewound with resin power inductor  
CSME Series



## DC-in Power

#### Over voltage protection

Power TVS  
SMA/SMB/SMC/SMD Series



## Main board

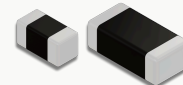
## HDMI

## USB

## LAN

#### EMI suppression filter

Multilayer chip bead  
MCB/MHC Series



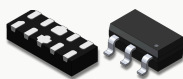
#### EMI suppression filter

Multilayer common mode choke  
MCM/HCM Series



#### Over voltage protection

ESD TVS  
TVC/TUV/TVW Series



#### Over voltage protection

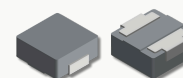
Multilayer Varistor  
MLVS/VPORT Series



## Class-D Amp

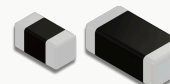
#### SMD power inductor

Molding power inductor  
AIP Series



#### EMI suppression filter

Multilayer chip bead  
MCB/MHC Series





# Application Guide

# NB/PC/Server



## Thunderbolt

## Main board

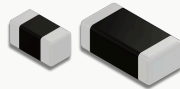
## Audio

## Display

## USB

## HDMI

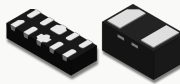
**EMI suppression filter**  
Multilayer chip bead  
MCB/MHC/MGB Series



**EMI suppression filter**  
Multilayer common mode choke  
MCM/HCM Series



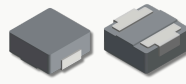
**Over voltage protection**  
ESD TVS  
TVC/TUV/TVW Series



**SMD power inductor**  
*Mini* molding power inductor  
WIP Series



**SMD power inductor**  
Molding power inductor  
AIP Series

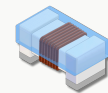


## Wireless Connectivity

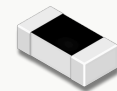
**RF Inductor**  
Multilayer ceramic RF Inductor  
MCI Series



**RF Inductor**  
Wired ceramic RF Inductor  
WCI Series



**Over voltage protection**  
ESD Suppressor  
EGA/TFE Series



## DC-in Power

**Over voltage protection**  
Power TVS  
SMA/SMB/SMC/SMD Series



# Application Guide

# Module

## RF front end

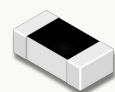
**RF Inductor**  
Multilayer ceramic RF Inductor  
MCI Series



**RF Inductor**  
Wired ceramic RF Inductor  
WCI Series

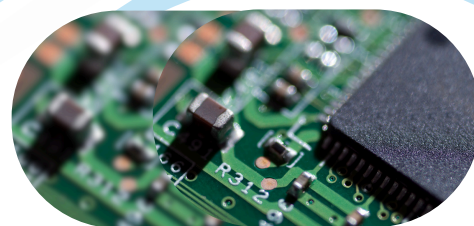


**Over voltage protection**  
ESD Suppressor  
EGA/TFE Series



## DC-DC power

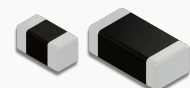
**SMD power inductor**  
*Mini* molding power inductor  
WIP Series



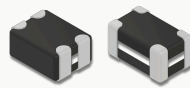
## Main board

## I/O line

**EMI suppression filter**  
Multilayer chip bead  
MCB/MHC/MGB Series



**EMI suppression filter**  
Multilayer common mode choke  
MCM/HCM Series

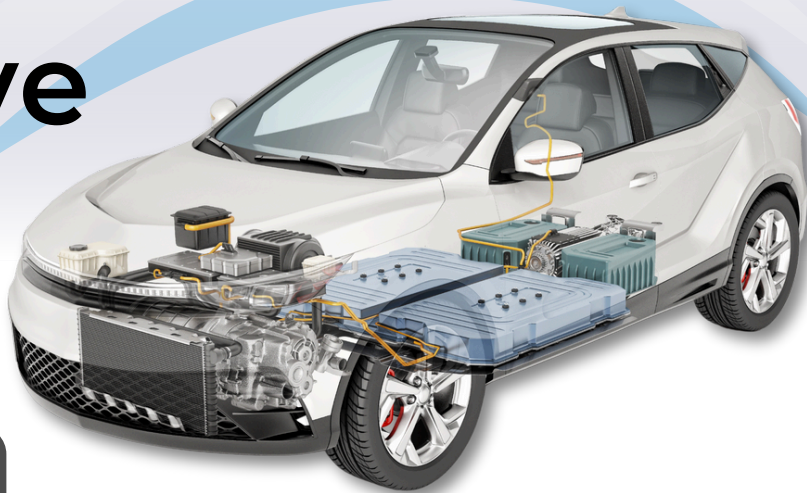


**Over voltage protection**  
ESD TVS  
TVC/TVW Series



# Application Guide

# Automotive



## Power in

### Over voltage protection

Power TVS

SMA/SMB/SMC/SMD/SM8S AM Series



## Main board

## CAN BUS

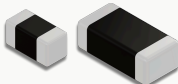
## USB

## LAN

### EMI suppression filter

Multilayer chip bead

MCB/MHC Series



### Over voltage protection

ESD TVS

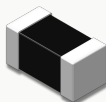
TVS AM Series



### Over voltage protection

Multilayer Varistor

MLVS LAM/AAM Series



## DC-DC power

### SMD power inductor

Mini molding power inductor

WPA Series



### SMD power inductor

Molding power inductor

APA Series



### SMD power inductor

Wirewound with resin power inductor

CSMEA Series



# Application Guide

# Shark Fin



## RF front end

### RF Inductor

Multilayer ceramic RF Inductor

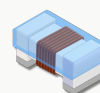
MCI Series



### RF Inductor

Wirewound ceramic RF Inductor

WCI Series



### Over voltage protection

ESD Suppressor

EGA AM/TFE AM Series



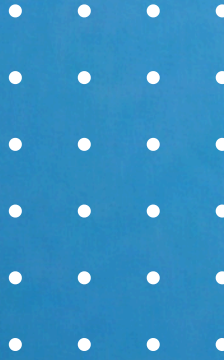




**WE CONNECT  
WE PROTECT**

**PSA** 佳邦科技股份有限公司  
INPAQ TECHNOLOGY CO., LTD.

**WE ARE INPAQ  
TECHNOLOGY**



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[info@inpaq.com.tw](mailto:info@inpaq.com.tw)

