佳邦科技股份有限公司
INPAQ TECHNOLOGY CO., LTD.

PSMCJ-AM Series

Specification

Product Name	ESD TVS (Transient Voltage Suppressor)
Series	PSMCJ-AM Series
Package Size	DO-214AB

PSMCJ-AM Series Engineering Specification

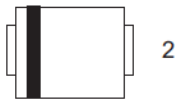
1. Features

- 1500W surface mount transient voltage suppressors
- Glass passivated chip junction
- Reliable low cost construction utilizing molded plastic technique
- Excellent clamping capability
- Low incremental surge resistance.
- Uni and Bidirectional unit
- Excellent clamping capability
- Very fast response time
- High reliability application and automotive grade AEC Q101 qualified
- RoHS compliant

2. Mechanical Date

- Case: Molded plastic DO-214AB
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Solderable per MIL-STD-750, method 2026
- Polarity: Color band denotes cathode end except Bipolar
- Mounting position: Any

3. Pinning Information

Pin	Simplified outline	Symbol
Uni-Directional Pin1 cathode Pin2 anode		
Bi-Directional		

4. Maximum Ratings @Ta=25ºC unless otherwise noted

Parameter	Symbol	Value	Unit
Peak power dissipation with a 10/1000μs waveform(1)	P_{PP}	1500	W
Peak pulse current with a 10/1000μs waveform(1)	I_{PP}	See Next Table	A
Power dissipation on infinite heatsink at T_L = 75 °C	P_D	6.5	W
Peak forward surge current, 8.3 ms single half sine-wave unidirectional only(2)	I_{FSM}	200	A
Maximum instantaneous forward voltage at 25A for unidirectional only(3)	V_F	3.5/5.0	V
Operating junction and storage temperature range	T_J, T_{STG}	- 55 to +150	°C

(1)Non-repetitive current pulse per Fig.5 and derated above TA= 25 °C per Fig.1
(2)Measured on 8.3 ms single half sine-wave or equivalent square wave, duty cycle = 4 pulses per minute maximum
(3)VF<3.5V for devices of VBR<200V and VF<5.0V for devices of VBR>201V

5. Electrical characteristics

Part Number (Uni)	Part Number (Bi)	Device Marking Code		Breakdown Voltage V_{BR} @I_T			Maximum Reverse Leakage IR@VRWM (uA)	Working Peak Reverse Voltage V_{RWM}(V)	Maximum Reverse Surge Current I_{PP} (A)	Maximum Clamping Voltage VC @I_{PP}(V)
		Uni	Bi	Min (V)	Max (V)	I_T (mA)				
PSMCJ12A-AM	PSMCJ12CA-AM	12AA	12CA	11.4	12.6	1	5	10.2	89.82	16.7
PSMCJ13A-AM	PSMCJ13CA-AM	13AA	13CA	12.35	13.65	1	1	11.1	82.42	18.2
PSMCJ15A-AM	PSMCJ15CA-AM	15AA	15CA	14.25	15.75	1	1	12.8	70.75	21.2
PSMCJ16A-AM	PSMCJ16CA-AM	16AA	16CA	15.2	16.8	1	1	13.6	66.67	22.5
PSMCJ18A-AM	PSMCJ18CA-AM	18AA	18CA	17.1	18.9	1	1	15.3	59.52	25.2
PSMCJ20A-AM	PSMCJ20CA-AM	20AA	20CA	19	21	1	1	17.1	54.15	27.7
PSMCJ22A-AM	PSMCJ22CA-AM	22AA	22CA	20.9	23.1	1	1	18.8	49.02	30.6
PSMCJ24A-AM	PSMCJ24CA-AM	24AA	24CA	22.8	25.2	1	1	20.5	45.18	33.2
PSMCJ27A-AM	PSMCJ27CA-AM	27AA	27CA	25.65	28.35	1	1	23.1	40	37.5
PSMCJ30A-AM	PSMCJ30CA-AM	30AA	30CA	28.5	31.5	1	1	25.6	36.23	41.4
PSMCJ33A-AM	PSMCJ33CA-AM	33AA	33CA	31.35	34.65	1	1	28.2	32.82	45.7
PSMCJ36A-AM	PSMCJ36CA-AM	36AA	36CA	34.2	37.8	1	1	30.8	30.06	49.9
PSMCJ39A-AM	PSMCJ39CA-AM	39AA	39CA	37.05	40.95	1	1	33.3	27.83	53.9
PSMCJ43A-AM	PSMCJ43CA-AM	43AA	43CA	40.85	45.15	1	1	36.8	25.3	59.3
PSMCJ47A-AM	PSMCJ47CA-AM	47AA	47CA	44.65	49.35	1	1	40.2	23.15	64.8
PSMCJ51A-AM	PSMCJ51CA-AM	51AA	51CA	48.45	53.55	1	1	43.6	21.4	70.1
PSMCJ56A-AM	PSMCJ56CA-AM	56AA	56CA	53.2	58.8	1	1	47.8	19.48	77
PSMCJ62A-AM	PSMCJ62CA-AM	62AA	62CA	58.9	65.1	1	1	53	17.65	85
PSMCJ68A-AM	PSMCJ68CA-AM	68AA	68CA	64.6	71.4	1	1	58.1	16.3	92
PSMCJ75A-AM	PSMCJ75CA-AM	75AA	75CA	71.25	78.75	1	1	64.1	14.56	103
PSMCJ82A-AM	PSMCJ82CA-AM	82AA	82CA	77.9	86.1	1	1	70.1	13.27	113
PSMCJ91A-AM	PSMCJ91CA-AM	91AA	91CA	86.45	95.55	1	1	77.8	12	125

6. Typical Characteristics

Fig. 1 - Pulse Derating Curve

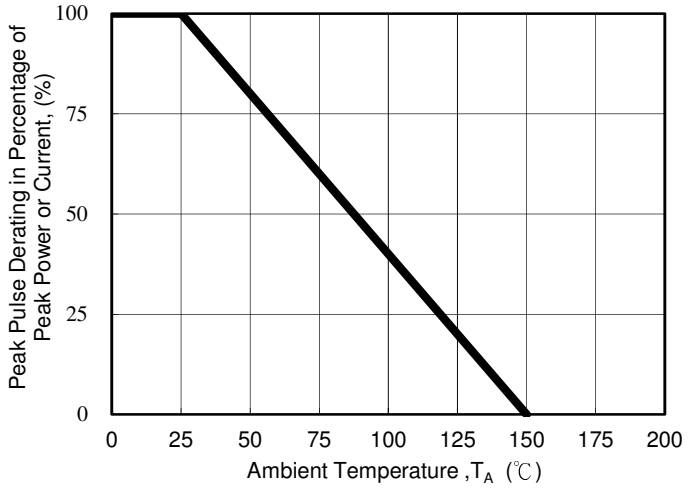


Fig. 2 - Maximum Non-Repetitive Surge Current

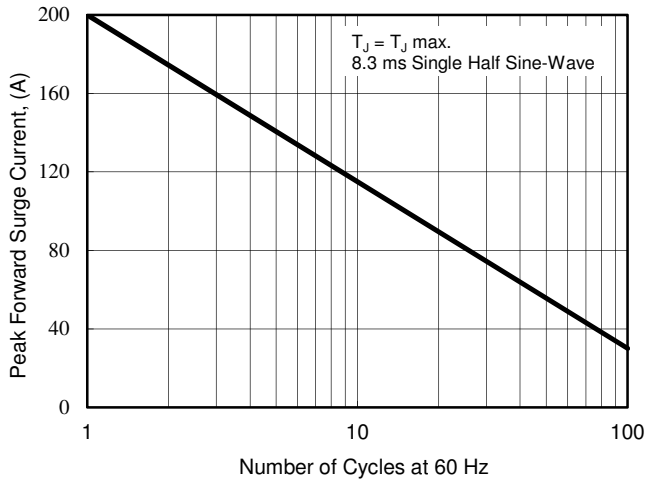


Fig. 3 - Steady State Power Derating Curve

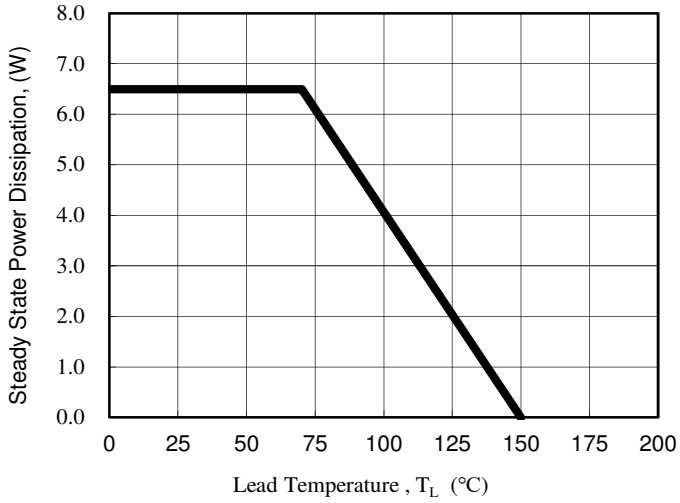


Fig. 4 - Peak Pulse Power Rating Curve

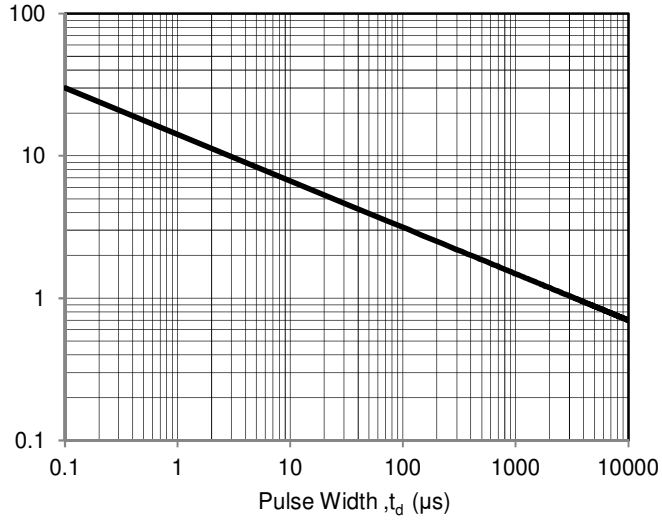


Fig. 5 - Pulse Waveform

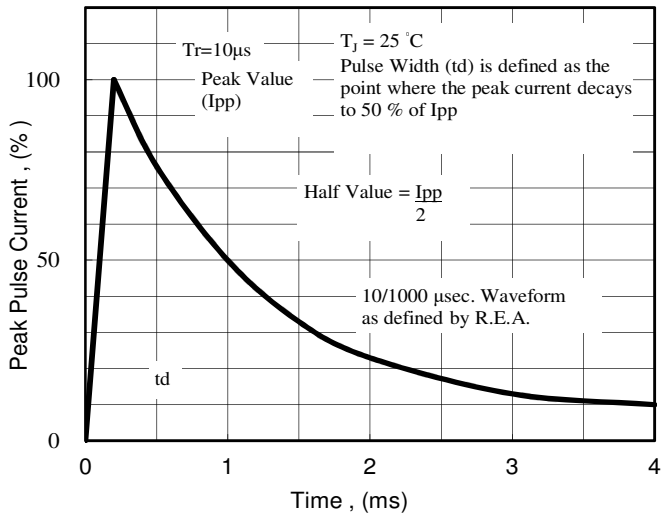


Fig. 6 - Typical Junction Capacitance