

TVL 01005 01 AC0 Engineering Specification

1. Scope

GENERAL DESCRIPTION

TVL 01005 01 AC0 is a silicon base in ultra small SMD special packages. It is designed to protect sensitive electronics from damage or latch up due to Electrostatic Discharge (ESD), lightning, and other voltage induced transient events.

FEATURES

- ◆ Bi-directional ESD Protection of one line.
- ◆ Low leakage current
- ◆ Full RoHS Compliance
- ◆ Ultra small SMD special packages

APPLICATIONS

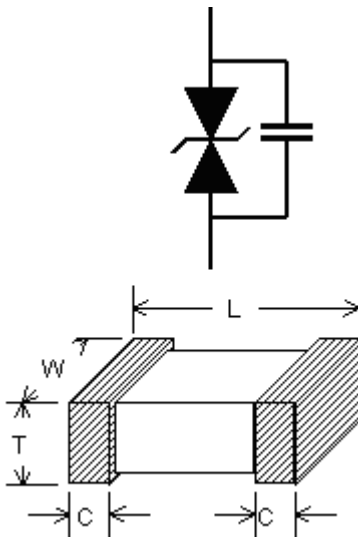
- ◆ Cellular handsets and accessories
- ◆ Audio and video equipment
- ◆ Communication systems
- ◆ Digital Camara and TV
- ◆ Portable electronics
- ◆ Computers and peripherals

2. Explanation of Part Number

TV **L** **01005** **01** **AC0**
 (1) (2) (3) (4) (5)

- (1) Product Type : TV=TVS Diode
- (2) Capacitance Code
- (3) Package Size Code
- (4) Channel Code : 01=1 Channels
- (5) Specialized Specification Code

3. Circuit Diagram & Dimension



Unit: mm	01005
L	0.40±0.03
W	0.23±0.03
T	0.17±0.03
C	0.11±0.03

4. Specifications

4.1. ABSOLUTE MAXIMUM RATINGS

PARAMETER	PARAMETER	RATING	UNITS
Operating Supply Voltage	V_{DC}	5.5	V
Operating Temperature range	T_o	-40 ~ +85	°C
Storage Temperature range	T_s	-55 ~ +125	°C
Lead Soldering Temperature	T_{SOL}	260 (10 sec.)	°C
ESD per IEC 61000-4-2 (Air)	V_{ESD}	±15	kV
ESD per IEC 61000-4-2 (Contact)	V_{ESD}	±8	kV

4.2. ELECTRICAL CHARACTERISTICS

ELECTRICAL CHARACTERISTICS						
PARAMETER	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNITS
Reverse Stand-Off Voltage	V_{RWM}	$T=25^{\circ}\text{C}$.			5	V
Reverse Leakage Current	I_{Leak}	$V_{RWM} = 5\text{V}, T=25^{\circ}\text{C}$.			1	μA
Reverse Breakdown Voltage	V_{BV}	$I_{BV} = 1\text{mA}, T=25^{\circ}\text{C}$.	8			V
Channel Input Capacitance	C_{IN}	$V_R = 0\text{V}, f = 1\text{MHz}, T=25^{\circ}\text{C}$.		1		pF