

FIVE BI-DIRECTIONAL TVS ARRAY FOR ESD PROTECTION

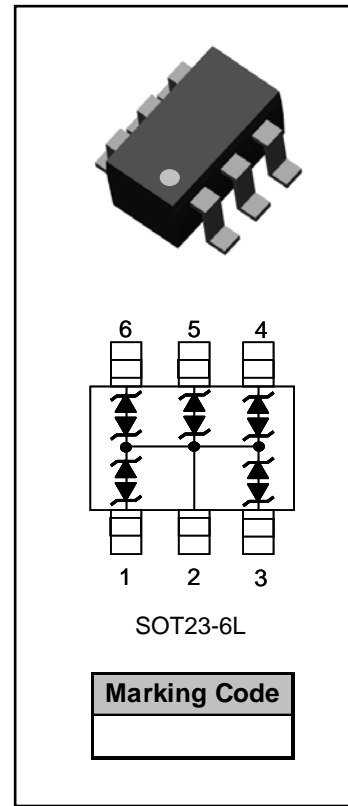
This Penta TVS Array has been designed to Protect Sensitive Equipment against ESD and to prevent Latch-Up events in CMOS circuitry operating at 5Vdc and below. This TVS array offers an integrated solution to protect up to 5 data lines where the board space is a premium.

SPECIFICATION FEATURES

- 80W Power Dissipation (8/20μs Waveform)
- Low Leakage Current, Maximum of 1μA @ 5Vdc
- Very low Clamping voltage
- IEC61000-4-2 ESD 15kV air, 8kV Contact Compliance
- Industry standard SOT23-6L
- 100% Tin Matte Finish (RoHS Compliant)

APPLICATIONS

- Video I/O ports protection
- Set Top Boxes
- Portable Instrumentation



MAXIMUM RATINGS

Rating	Symbol	Value	Units
Peak Pulse Power (8/20μs Waveform)	P_{pp}	80	W
Peak Pulse Current (8/20μs Waveform)	I_{pp}	5.0	A
ESD Voltage (HBM)	V_{ESD}	>25	kV
Operating Temperature Range	T_J	-55 to +150	°C
Storage Temperature Range	T_{stg}	-55 to +150	°C

ELECTRICAL CHARACTERISTICS $T_J = 25^{\circ}\text{C}$

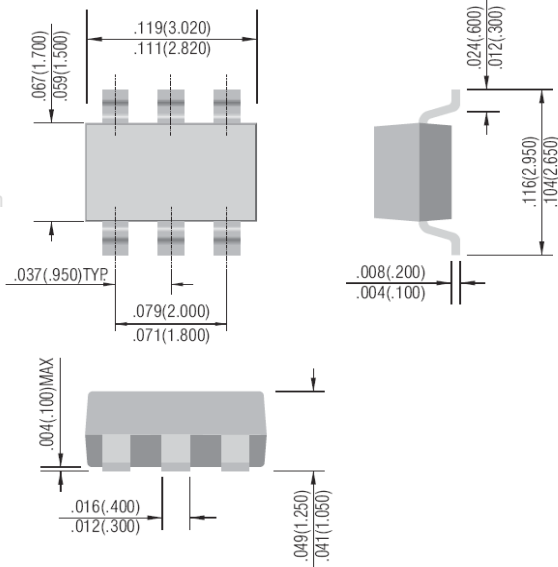
Parameter	Symbol	Conditions	Min	Typical	Max	Units
Reverse Stand-Off Voltage	V_{WRM}				5.0	V
Reverse Breakdown Voltage	V_{BR}	$I_{BR} = 1\text{mA}$	6.2		8.0	V
Reverse Leakage Current	I_R	$V_R = 5\text{V}$			1	μA
Clamping Voltage (8/20μs)	V_C	$I_{pp} = 1\text{A}$			12	V
Clamping Voltage (8/20μs)	V_C	$I_{pp} = 4\text{A}$			15	V
Off State Junction Capacitance	C_j	0 Vdc Bias $f = 1\text{MHz}$ Between I/O pins and pin 2			15	pF
Off State Junction Capacitance	C_j	5 Vdc Bias $f = 1\text{MHz}$ Between I/O pins and pin 2			7	pF



PACKAGE LAYOUT DIMENSIONS

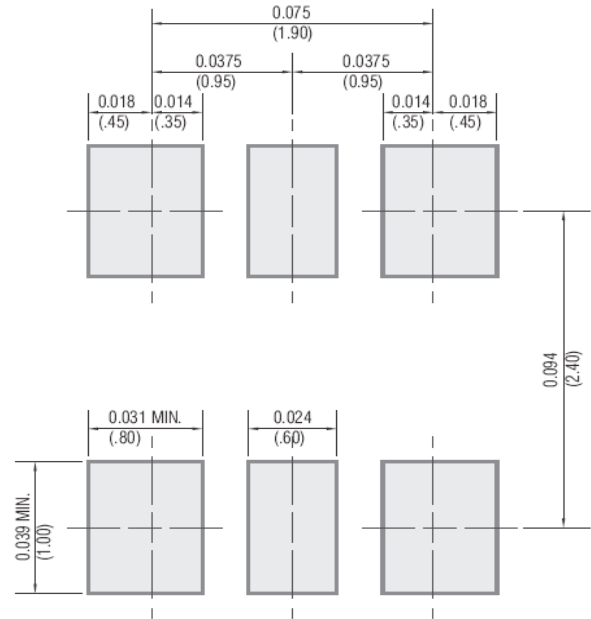
SOT-23-6L

Unit: inch (mm)



SOT23-6L

Unit: inch (mm)



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