



PJSDA05C-4

TVS ARRAY QUAD 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 4 data lines where the board space is a premium.

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
- In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

- Case: SOT23-6L molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Weight: 0.0005 ounce, 0.0141 gram
- Marking : QCG

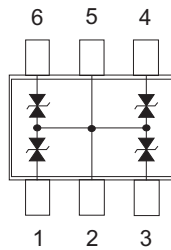
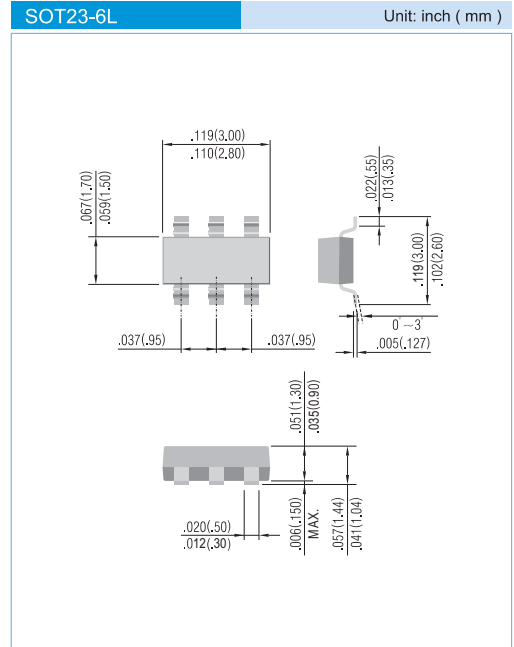


Fig. 126



MAXIMUM RATINGS

Parameter	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°C

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Stand-Off Voltage	V _{RWM}	-	-	-	5.0	V
Reverse Breakdown Voltage	V _{BR}	I _{BR} =1mA	6.2	-	8.0	V
Reverse Leakage Current	I _R	V _R =5V	-	-	1	μA
Clamping Voltage (8/20μs)	V _C	I _{PP} =1A	-	-	12	V
Clamping Voltage (8/20μs)	V _C	I _{PP} =4A	-	-	15	V
Off State Junction Capacitance	C _J	0Vdc Bias f=1MHz Between I/O pins and pin 2	-	15	17	pF
Off State Junction Capacitance	C _J	5Vdc Bias f=1MHz Between I/O pins and pin 2	-	7	10	pF



PJSDA05C-4

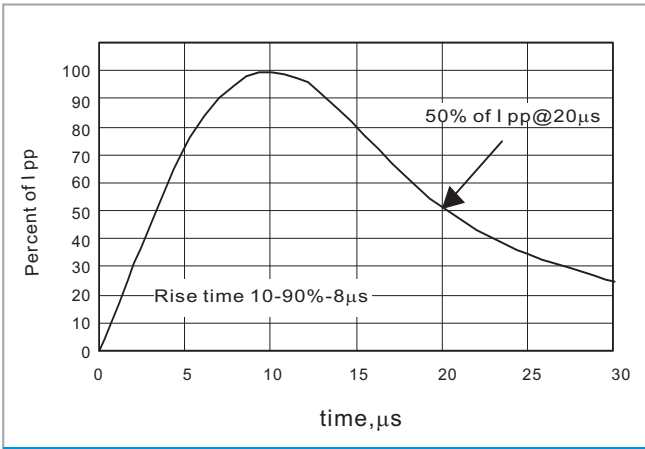


FIG 1-PULSE WAVEFORM

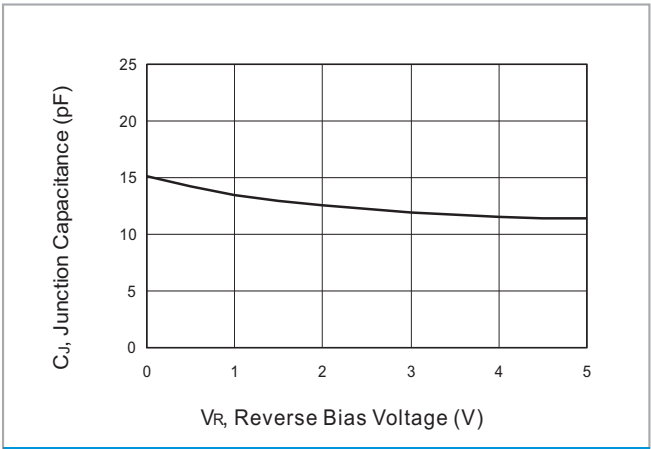


FIG 2- TYPICAL JUNCTION CAPACITANCE UNDER BIAS

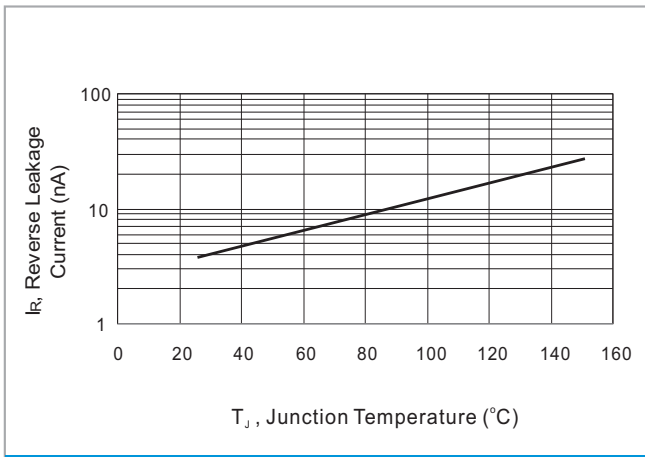


FIG 3- TYPICAL LEAKAGE CURRENT vs JUNCTION TEMPERATURE

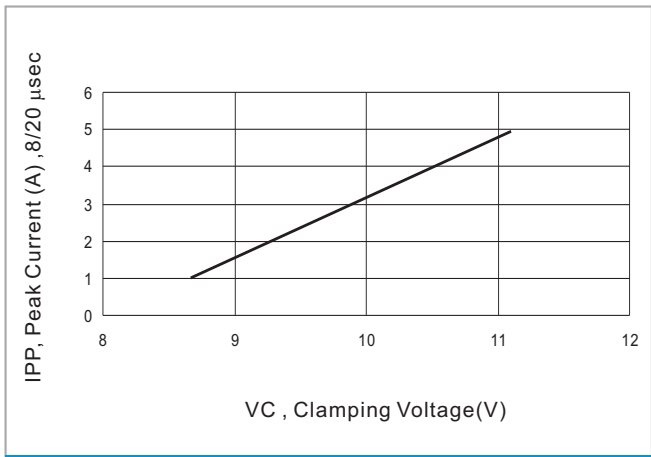
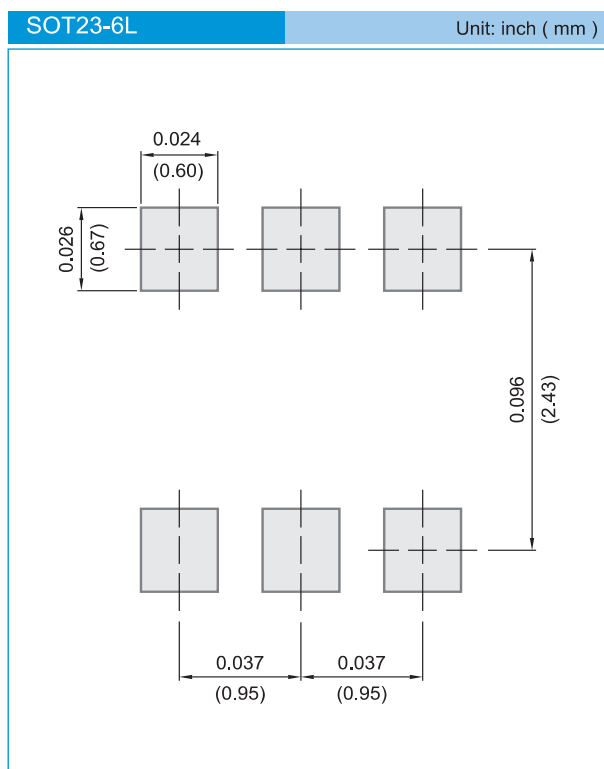


FIG 4- CLAMPING VOLTAGE vs PEAK CURRENT



PJSDA05C-4

MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
 - T/R - 10K per 13" plastic Reel
 - T/R - 3K per 7" plastic Reel

LEGAL STATEMENT

Copyright PanJit International, Inc 2010

The information presented in this document is believed to be accurate and reliable. The specifications and information herein are subject to change without notice. Pan Jit makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose. Pan Jit products are not authorized for use in life support devices or systems. Pan Jit does not convey any license under its patent rights or rights of others.