

QUAD TVS/ZENER ARRAY FOR ESD AND LATCH-UP PROTECTION

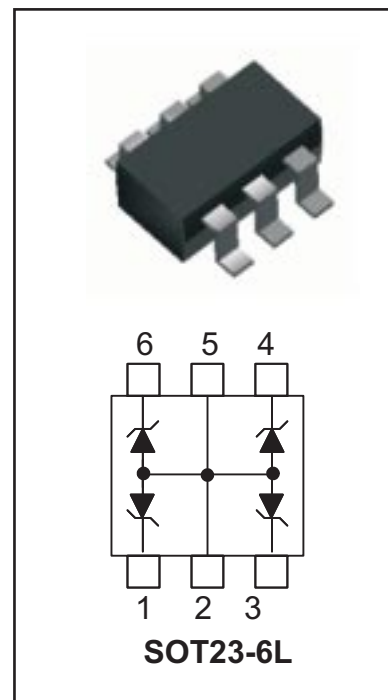
This Quad TVS/Zener Array has been designed to Protect Sensitive Equipment against Electrostatic Discharge and preventing Latch-Up events, as well to offer a Minimum Insertion Loss in Data Transmission Lines in Communications Ports used in Portable Consumer, Computing and Networking Applications operating at 5Vdc. The integration of 4 TVS in a single package gives ESD and Transient Protection to four data lines, offering a substantial board space reduction.

SPECIFICATION FEATURES

- Improved Low Leakage Current, Maximum of 5 μ A @ 5Vdc
- Maximum Capacitance @ 0Vdc of 200pF
- IEC 61000-4-2 ESD 15kV air, 8kV contact Compliance
- IEC 61000-4-5 Lightning 24 Amps peak, 8x20 μ sec Waveform
- Industry Standard SMT Package SOT23-6 Lead

APPLICATIONS

- SIM Card Port (Mobile Phones)
- Personal Digital Assistant (PDA's)
- Serial or Parallel Ports in PC's (RS-485, Centronics, RS232C, etc)
- Portable Instrumentation
- Microprocessor Interface Ports



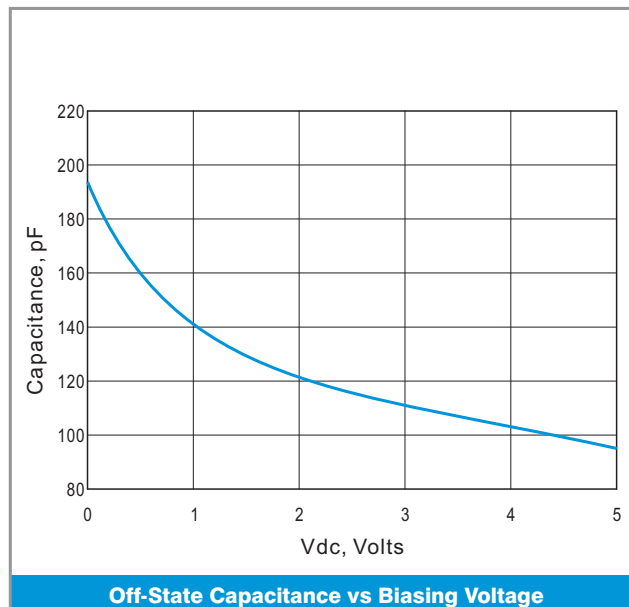
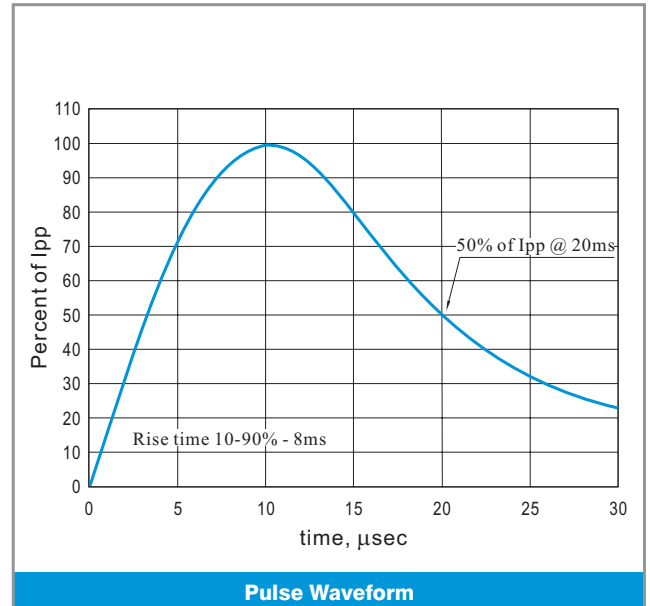
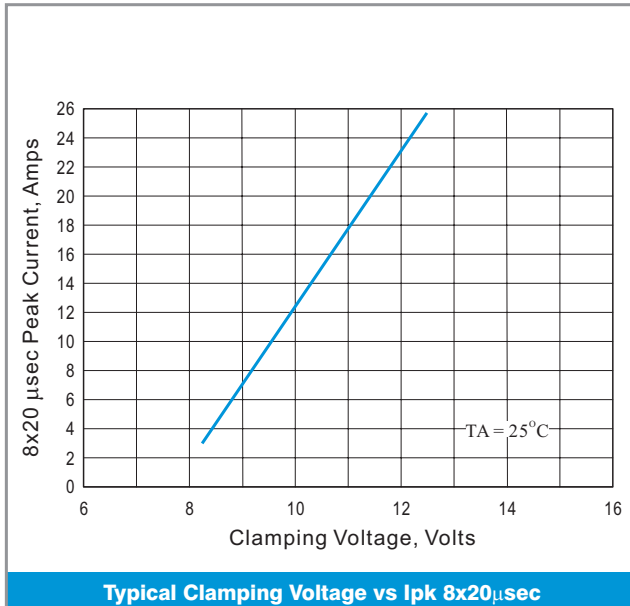
MAXIMUM RATINGS

Rating	Symbol	Value	Units
Peak Pulse Power (8x20 μ sec Waveform)	Ppk	350	W
Peak Pulse Current 8x20 μ sec	Ipp	24	A
ESD Voltage (HBM)	Vesd	>25	kV
Operating Temperature Range	TL	-55 to +125	°C
Storage Temperature Range	Tstg	-55 to +150	°C

ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Conditions	Min.	Typical	Max.	Units
Reverse Stand-Off Voltage	VWRM				5	Volts
Reverse Breakdown Voltage	VBR	IBR = 1mA	6			Volts
Reverse Leakage Current	IR	VRWM = 5V TA = 25°C			5	μ A
Clamping Voltage	Vc	Ipp = 5A 8 x 20 μ sec			9.5	Volts
Clamping Voltage	Vc	Ipp = 24A 8 x 20 μ sec			13	Volts
Off-State Junction Capacitance	Cj	Vdc = 0V, f = 1MHz Between I/O Pins and Gnd (Pin 2 or 5)			200	pF
Off-State Junction Capacitance	Cj	Vdc = 5V, f = 1MHz Between I/O Pins and Gnd (Pin 2 or 5)			110	pF

RATING AND CHARACTERISTIC CURVES



PRELIMINARY

TVS/ZENER
PJSMS05

TYPICAL APPLICATION CONFIGURATION

