

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

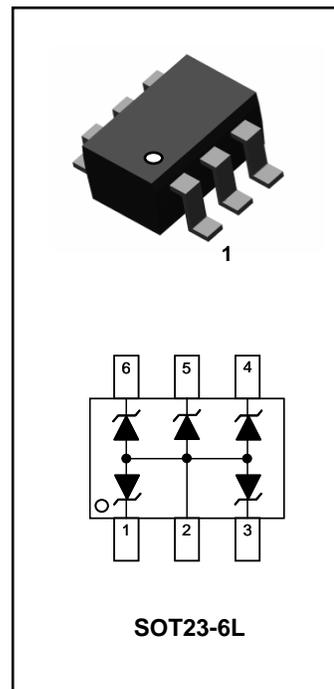
This Quad TVS/Zener Array family have been designed to Protect Sensitive Equipment against ESD and to prevent Latch-Up events in CMOS circuitry operating in the 5V. This TVS array offers an integrated solution to protect up to 5 data lines where the board space is a premium.

SPECIFICATION FEATURES

- 150W (8/20 μ s), 24W (10/1000 μ s) Power Dissipation
- Low Leakage Current, Maximum of 2 μ A at rated voltage
- Very Low Clamping Voltage
- IEC61000-4-2 ESD 20kV air, 15kV Contact Compliance
- Industry Standard Surface Mount Package SOT23-6L
- 100% Tin Matte Finish (RoHS Compliant)

APPLICATIONS

- Personal Digital Assistant (PDA)
- SIM Card Port Protection (Mobile Phone)
- Portable Instrumentation
- Mobile Phones and Accessories
- Memory Card Port Protection



Marking Code: "Q5A"

MAXIMUM RATINGS (Per Device)

Rating	Symbol	Value	Units
Peak Pulse Power (8/20 μ s Waveform)	P_{pp}	150	W
ESD Voltage (HBM)	V_{ESD}	25	kV
Operating Temperature Range	T_J	-55 to +150	$^{\circ}$ C
Storage Temperature Range	T_{stg}	-55 to +150	$^{\circ}$ C

ELECTRICAL CHARACTERISTICS (Per Device) $T_J = 25^{\circ}$ C

PJQA5V6C

Parameter	Symbol	Conditions	Min	Typical	Max	Units
Reverse Stand-Off Voltage	V_{WRM}				3.0	V
Reverse Breakdown Voltage	V_{BR}	$I_{BR} = 1$ mA	5.3	5.6	5.88	V
Reverse Leakage Current	I_R	$V_R = 3.0$ V			2	μ A
Clamping Voltage (8/20 μ s)	V_C	$I_{pp} = 5$ Amps			7.5	V
Clamping Voltage (8/20 μ s)	V_C	$I_{pp} = 10$ Amps			9.1	V
Off State Junction Capacitance	C_j	0 Vdc Bias f = 1MHz Between I/O pins and pin 2,5			265	pF
Off State Junction Capacitance	C_j	3 Vdc Bias f = 1MHz Between I/O pins and pin 2,5			170	pF

