

E.S.D. Dual Protection Diode Array

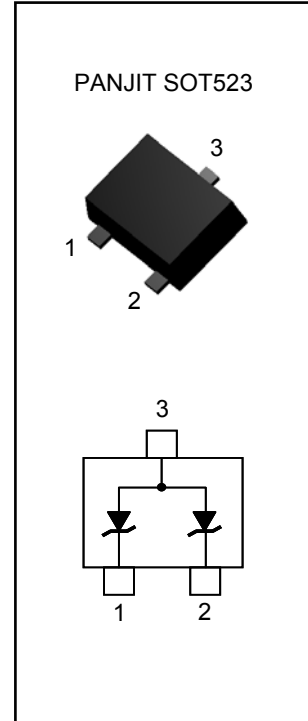
This Dual Unidirectional ESD Protector Array family have been designed to protect sensitive equipment against ESD in high speed transmission buses, operating at 5V. This dual array offers an integrated solution to protect up to 2 data lines in a unidirectional mode or, 1 data line in a bi-directional mode, in application where the board space is a premium, in our SOT523 package version.

SPECIFICATION FEATURES

- IEC61000-4-2 ESD 15kV air, 8kV Contact Compliance
- Low Leakage Current, Maximum of 0.5 μ A at rated voltage
- Maximum Capacitance of 10pF per device at 0Vdc 1MHz
- Peak Power Dissipation of 20W 8/20 μ s Waveform
- Pin to pin compatible with standard SOT523
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APPLICATIONS

- Mobile Phones
- Digital Cameras
- Notebooks PC's



MAXIMUM RATINGS (Per Device)

Rating	Symbol	Value	Units
Peak Pulse Power (8/20 μ s Waveform)	P _{PP}	20	W
Peak Pulse Current (8/20 μ s Waveform)	I _{PPM}	2	A
ESD Voltage (HBM Per MIL STD883C - Method 3015-6)	V _{ESD}	20	kV
Operating Temperature Range	T _J	-55 to +125	°C
Storage Temperature Range	T _{stg}	-55 to +150	°C

ELECTRICAL CHARACTERISTICS (Per Device) T_j = 25°C

Parameter	Symbol	Conditions	Min	Typical	Max	Units
Reverse Stand-Off Voltage	V _{WRM}				5.0	V
Reverse Breakdown Voltage	V _{BR}	I _{BR} = 1mA	6.2		7.2	V
Reverse Leakage Current	I _R	V _R = 5V			0.5	μ A
Clamping Voltage (8/20 μ s)	V _C	I _{pp} = 2A			10	V
Off State Junction Capacitance*	C _j	0 Vdc Bias f = 1MHz between pin 1, 2 to 3 (Gnd)		9	10	pF

* Capacitance between pins 1 and 2 is half of the value, in a bi-directional configuration.