



Features

- 300 watts peak pulse power ($t_p = 8/20\mu s$)
- ESD Protection > 40 kilovolts
- Protects one bidirectional line or two unidirectional lines
- Working Voltages: 15.0V
- Two devices protect two high-speed line pairs
- Low clamping voltages



SOT-23

IEC COMPATIBILITY (EN61000-4)

- IEC 61000-4-2 (ESD) $\pm 15kV$ (air), $\pm 8kV$ (contact)
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lightning) 18A (8/20 μs)

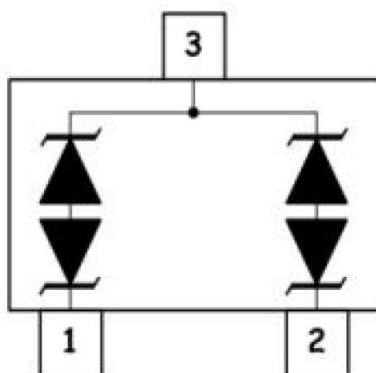
Mechanical Characteristics

- JEDEC SOT23 package
- Molding compound flammability rating: UL 94V-0
- Marking: Marking Code
- Packaging: Tape and Reel per EIA 481
- RoHS/WEEE Compliant

Applications

- RS-232, RS-422 & RS-485
- Cellular Handsets and Accessories
- Control & Monitoring Systems
- Portable Electronics
- Set-Top Box
- Servers, Notebook, and Desktop PC
- Wireless Bus Protection

Schematic & PIN Configuration



**Absolute Maximum Rating**

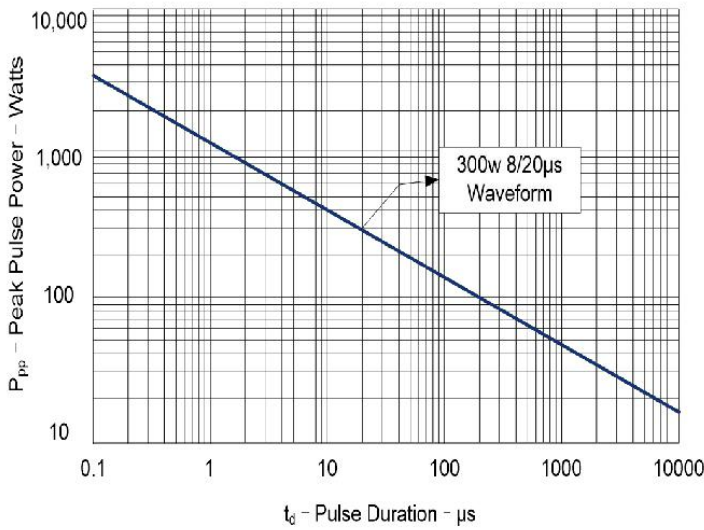
Rating	Symbol	Value	Units
Peak Pulse Power ($t_p=8/20\mu s$)	P _{PP}	300	Watts
Lead Soldering Temperature	T _L	260(10sec)	°C
Operating Temperature	T _J	-55 to + 125	°C
Storage Temperature	T _{STG}	-55 to +150	°C

Electrical Characteristics

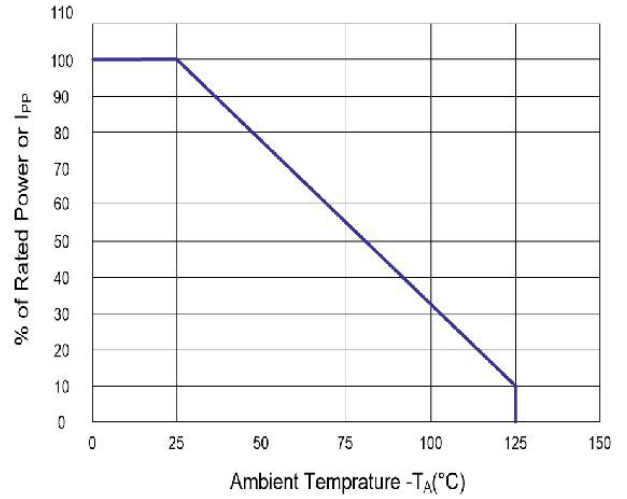
PT23C152V						
Parameter	Symbol	Conditions	Minimum	Typical	Maximum	Units
Reverse Stand-Off Voltage	V _{RWM}				15.0	V
Reverse Breakdown Voltage	V _{BR}	I _r =1mA	16.4			V
Reverse Leakage Current	I _R	V _{RWM} =15.0V, T=25°C			1	μA
Peak Pulse Current	I _{PP}	t _p =8/20μs			21	A
Clamping Voltage	V _C	I _{PP} =1A, t _p =8/20μs			24.35	V
Maximum Clamping Voltage	V _C	I _{PP} =10A, t _p =8/20μs			30.2	V
Off state junction Capacitance	C _j	V _R = 0V, f = 1MHz Between I/O pins And GND		15 pF		pF



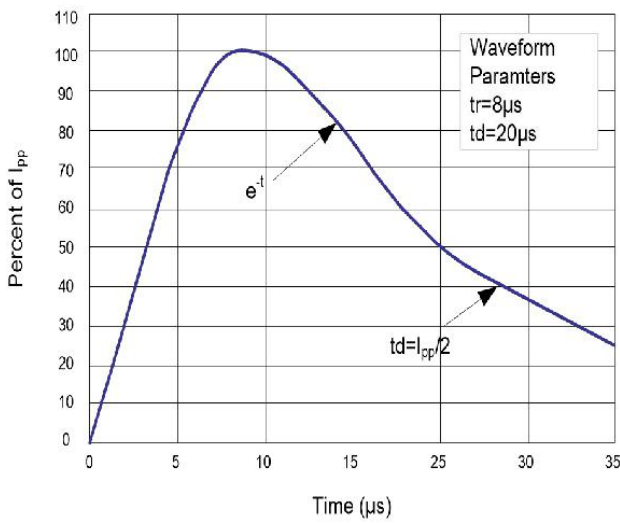
Peak Pulse Power vs. Pulse Time



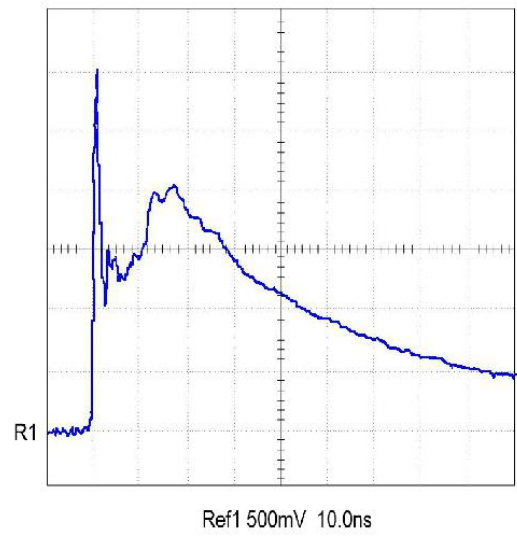
Power Derating Curve



Pulse Waveform



ESD Pulse Waveform (Per IEC 61000-4-2)





Outline Drawing – SOT-23

