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March 2007

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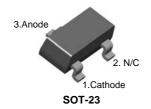
24 Watt Peak Power Zener Transient Voltage Suppressor

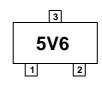
Applications

• For use as transient overvoltage protection for voltage and ESD sensitive equipment like laptop computers, HDD, printers, cellular phones, and other applications.

Features

- SOT-23 Zener for ESD Protection
- Pb-free
- Maximum Clamping voltage = 8V @ Peak Pulse Current= 3A
- Working Peak Reverse Voltage = 3V
- HBM = 16KV (Class 3) ESD Rating
- · Flammability Rating UL94 V-O





Connection Diagram



Absolute Maximum Ratings * $T_a = 25^{\circ}$ C unless otherwise noted

Symbol	Parameter	Value	Unit
V _{RWM}	Working Peak Reverse Voltage	3.0	V
P _D	Total Power Dissipation at 25°C 225 Derate above 25°C 1.8		mW mW/°C
P _{pk}	Peak Power Dissipation @1.0mS	27	W
T _{STG}	Storage Temperature	-55 to +150	°C
T _J	Operating Junction Temperature	+150	°C
$R_{\theta JA}$	Thermal Resistance Junction to Ambient, FR-5 Board	550	°C/W

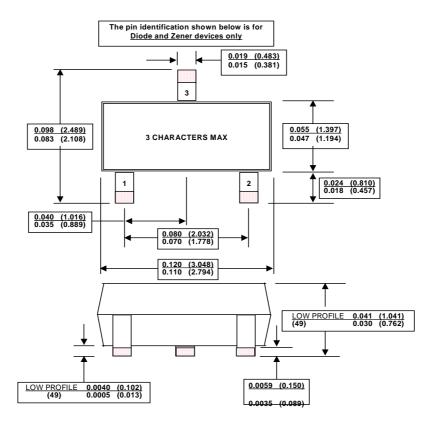
^{*} These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

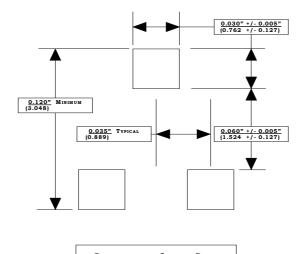
Electrical Characteristics T_C = 25°C unless otherwise noted

Symbol	Parameter	Conditions	Min.	Max.	Units
V _Z	Zener Voltage	$I_{ZT} = 20\text{mA}_{D.C}$ $I_{ZT} = 20\text{mA}_{Pulse\ 26\text{mS}}$	5.32 5.31	5.88 5.85	V V
Z _Z	Zener Impedance	I _{ZT} = 20mA		11	Ω
Z_{ZK}	Zener Knee Impedance	$I_{ZK} = 250\mu A$		1600	Ω
I _R	Reverse Leakage	V _R = 3V		5	μΑ
V _F	Forward Voltage	I _F = 10mA		900	mV
V _{CL}	Clamping Voltage	IPP=3A Square wave Tp=300uS		8.0	V

Mechanical Dimensions

SOT-23





RECOMMENDED SOLDER PADS FOR SOT-23





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