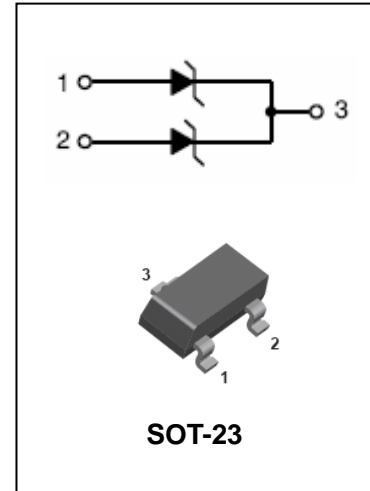


Dual Common Cathode Zeners for ESD Protection

MMBZ15VD

FEATURES

- SOT-23 package Allows Either Two Separate Unidirectional Configurations or a Single Bidirectional Configuration.
- Working Peak Reverse Voltage Range -12.8V,22V
- Standard Zener Breakdown Voltage Range-15V,27V



ORDERING INFORMATION

Type No.	Marking	Package Code
MMBZ15VD	15D	SOT-23

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Peak Power Dissipation	P_{pk}	40	Watts
Total Power Dissipation	P_D	225	mW
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	556	°C/W
Total Power Dissipation on Alumina Substrate	P_D	300	mW
Thermal Resistance Junction-to-Ambient	$R_{\theta JA}$	417	°C/W
Junction and Storage Temperature Range	T_j, T_{stg}	-55 to +150	°C
Lead Solder Temperature- Maximun	T_L	260	°C



Dual Common Cathode Zeners for ESD Protection

MMBZ15VD

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified]

(V_F=0.9V Max @I_F=10mA)

Device	Device Marking	V _{RWM}	I _R @V _{RWM}	Breakdown Voltage				V _C @I _{PP} (Note5)		V _{BR}
				V _{BR} (Note4)(V)			@I _T	V _C	I _{PP}	
				V _{olts}	nA	Min	Nom	Max	mA	V
MMBZ15VDLT1,G*	15D	12.8	100	14.3	15	15.8	1.0	21.2	1.9	12

(V_F=1.1V Max @I_F=200mA)

Device	Device Marking	V _{RWM}	I _R @V _{RWM}	Breakdown Voltage				V _C @I _{PP} (Note5)		V _{BR}
				V _{BR} (Note4)(V)			@I _T	V _C	I _{PP}	
				V _{olts}	nA	Min	Nom	Max	mA	V
MMBZ27VDLT1,G*	27C	22	50	25.65	27	28.35	1.0	38	1.0	26

*The "G" suffix indicates Pb-Free package available.

V_{BR} measured at pulse test current I_T at ambient temperature of 25°C.

Surge current waveform per Figure 5 and derate per Figure 6

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

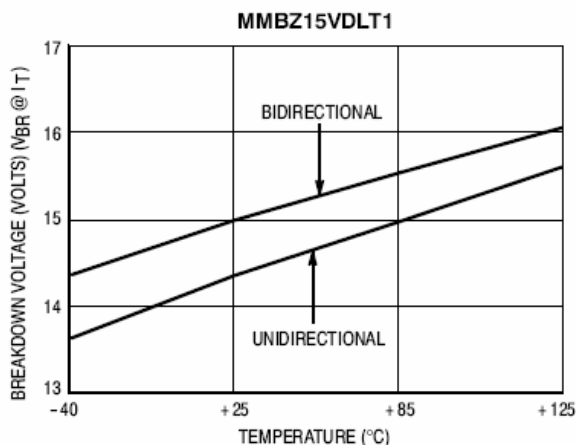


Figure 1. Typical Breakdown Voltage versus Temperature

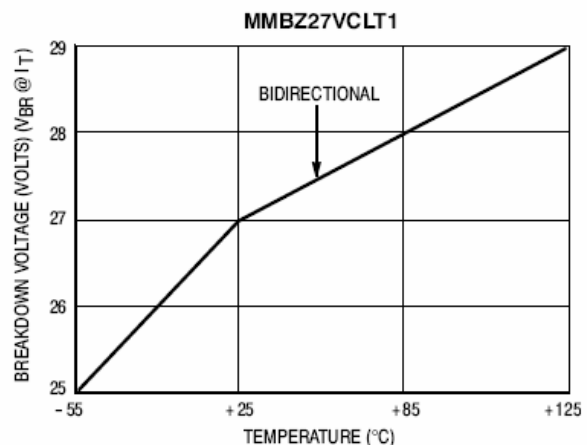


Figure 2. Typical Breakdown Voltage versus Temperature

Dual Common Cathode Zeners for ESD Protection

MMBZ15VD

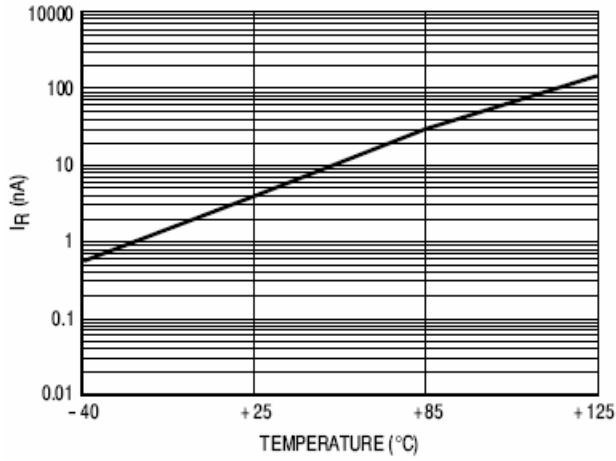


Figure 3. Typical Leakage Current versus Temperature

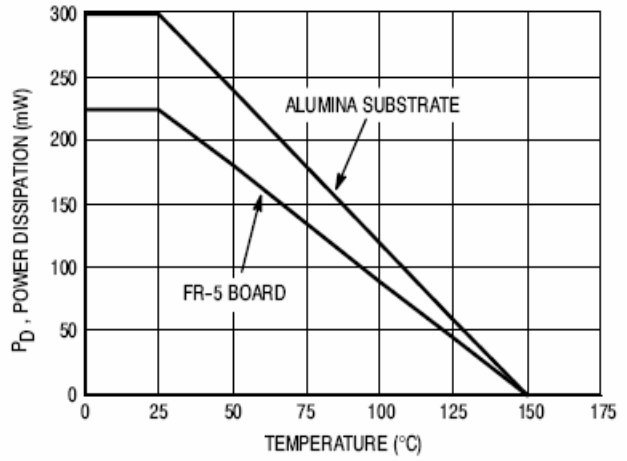


Figure 4. Steady State Power Derating Curve

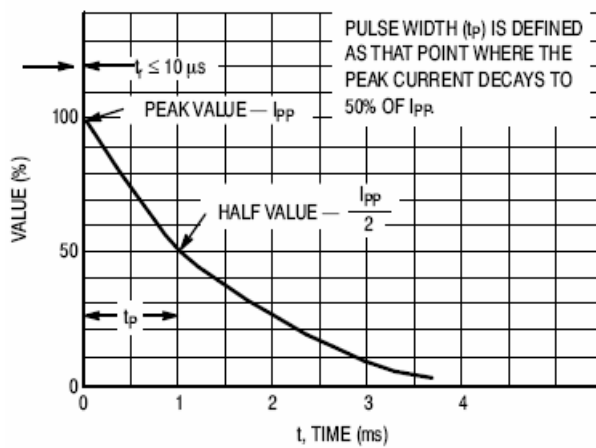


Figure 5. Pulse Waveform

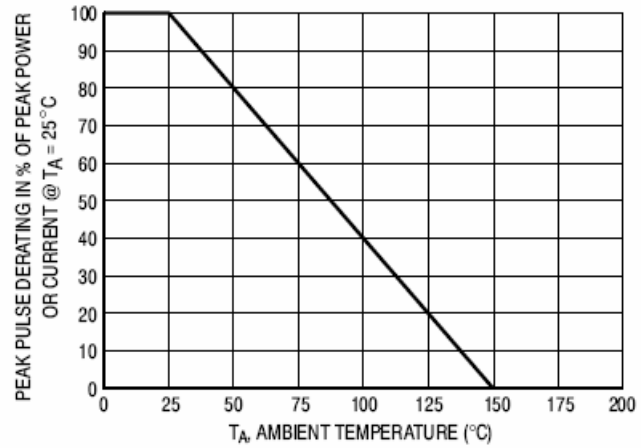


Figure 6. Pulse Derating Curve



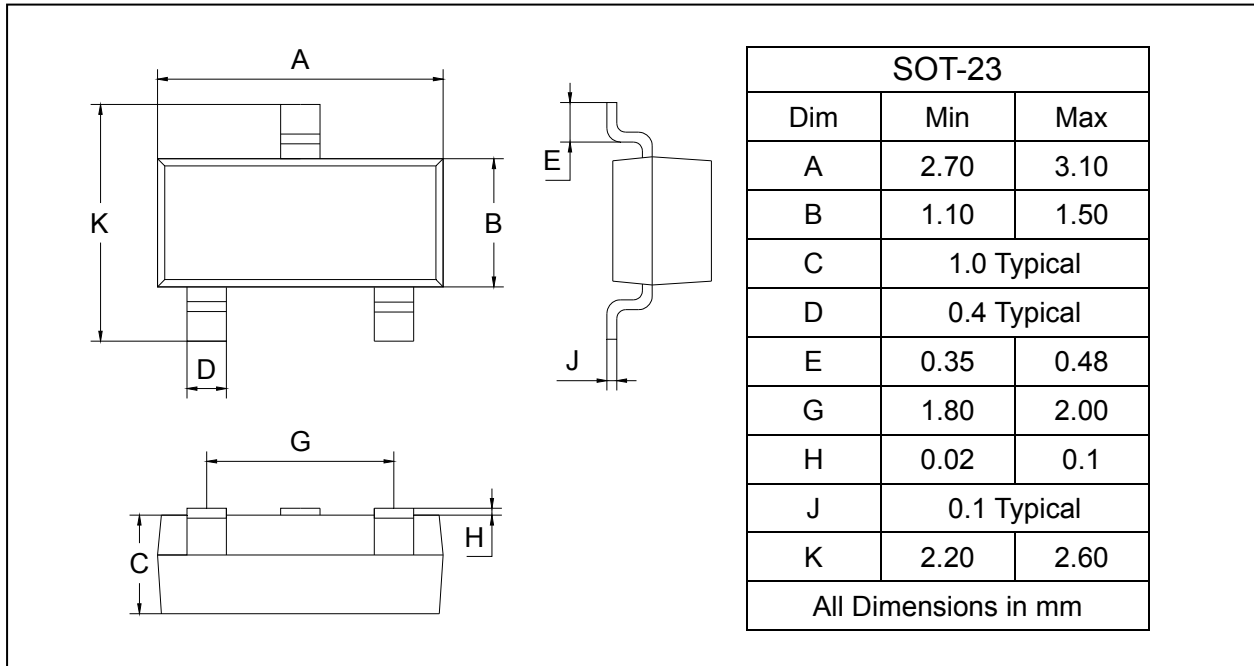
Dual Common Cathode Zeners for ESD Protection

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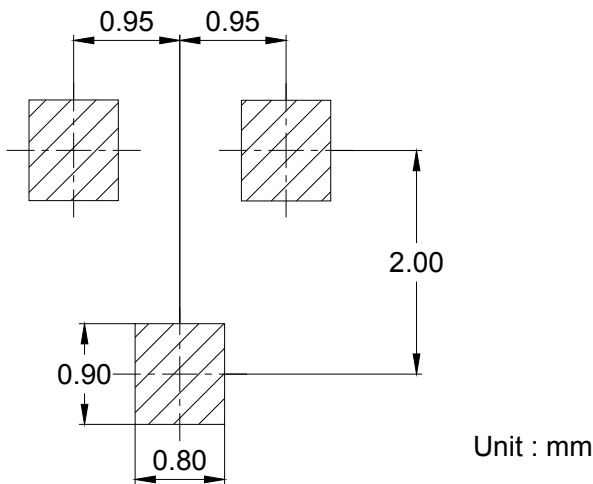
PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
MMBZ15VD	SOT-23	3000/Tape&Reel