



Features

- Planar Die Construction
- 500mW Power Dissipation on Ceramic PCB
- General Purpose, Medium Current
- Ideally Suited for Automated Assembly Processes
- Available in Lead Free Version



SOD-123

Package Marking and Ordering Information

Product ID	Pack	Brand	Qty(PCS)
MMSZ5245BT1G	SOD-123	HXY MOSFET	3000



Absolute Maximum Ratings(Ta=25°C)

Characteristic	Symbol	Value	Unit
Forward voltage @I _F =10mA	V _F	0.85	V
Power Dissipation	P _D	500	mW
Thermal Resistance, Junction to Ambient Air	R _{θJA}	556	°C/W
Junction Temperature	T _j	150	°C
Storage Temperature Range	T _{stg}	-55 ~ +150	°C

Notes: Device mounted on ceramic PCB;5.0mm×7.0mm with pad areas 35 mm²

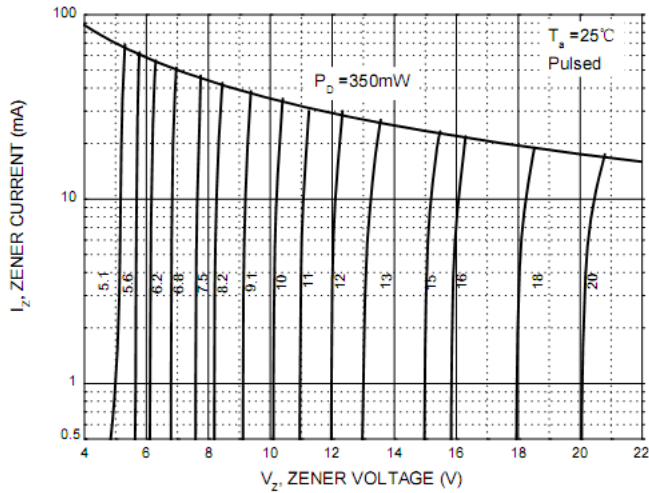
Electrical Characteristics (Ta=25°C unless otherwise specified)

Type Number	Type Code	Zener Voltage Range (Note 2)				Maximum Zener Impedance (Note 3)			Maximum Reverse Current		Typical Temperature Coefficient @I _{ZTC} mV/°C		Test Current I _{ZTC} mA
		Nom(V)	Min(V)	Max(V)	I _{ZT} mA	Z _{ZT} @I _{ZT} Ω	Z _{ZK} @I _{ZK} Ω	I _{ZK} mA	I _R μA	V _R V	Min	Max	
MMSZ5245BT1G	H5	15	14.70	15.30	5	28.5	190	1.0	0.1	11.0	9.2	13.0	5

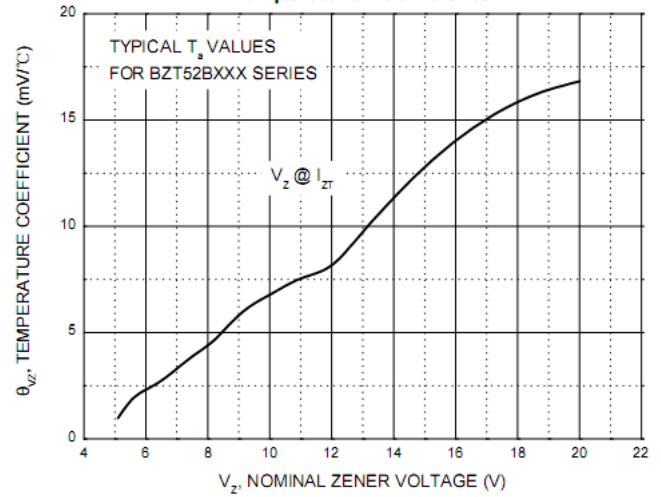


Typical Characteristics

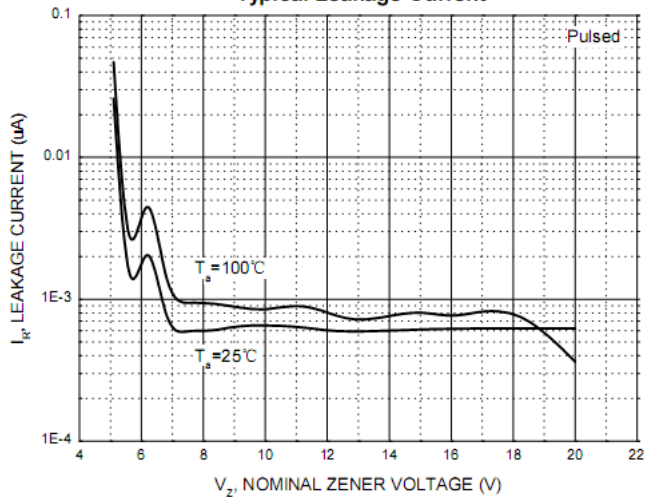
Zener Characteristics (V_Z 5.1V to 20 V)



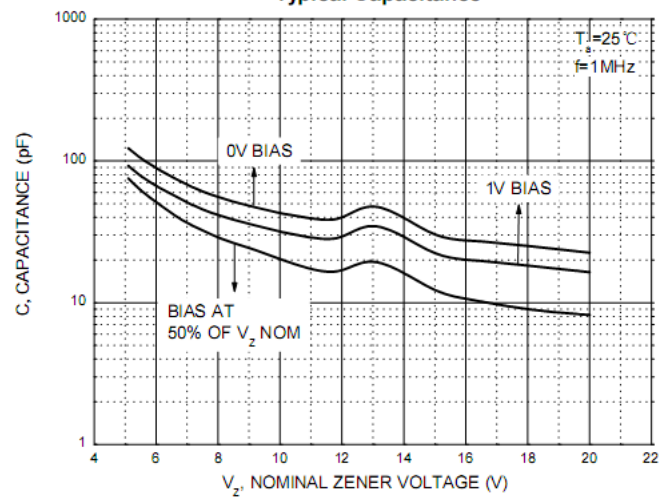
Temperature Coefficients



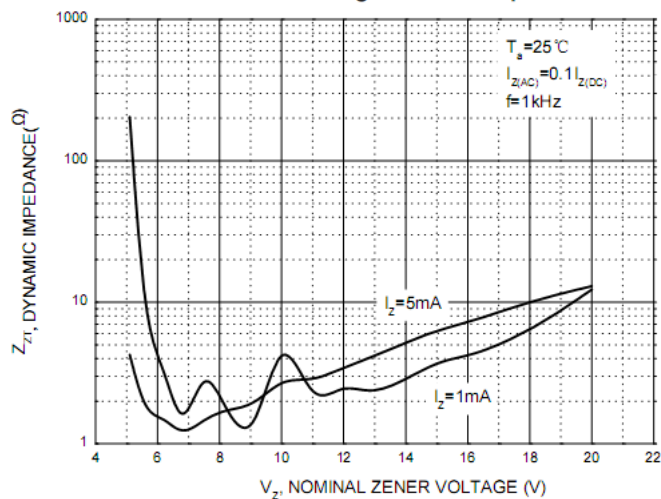
Typical Leakage Current



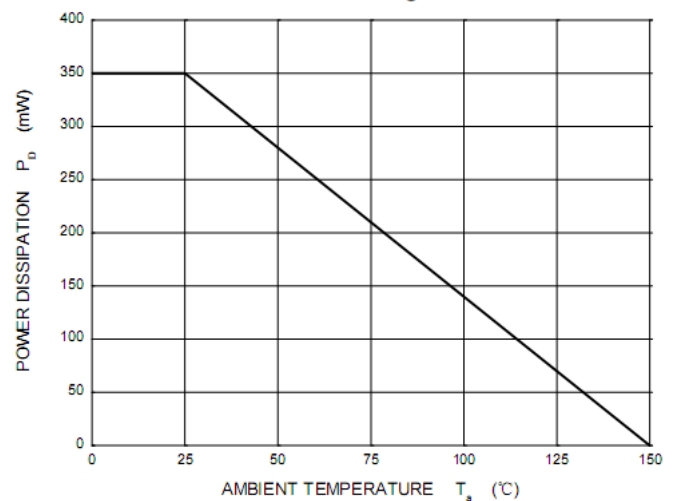
Typical Capacitance



Effect of Zener Voltage on Zener Impedance

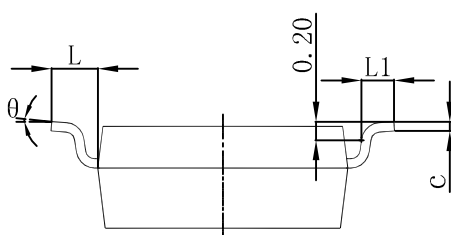
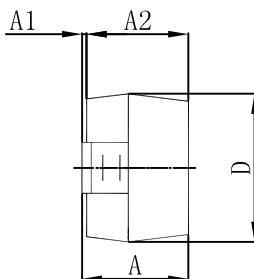
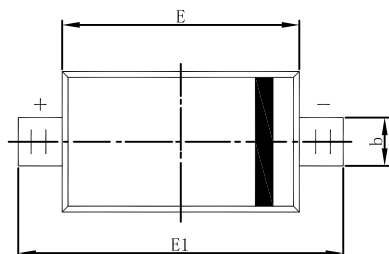


Power Derating Curve

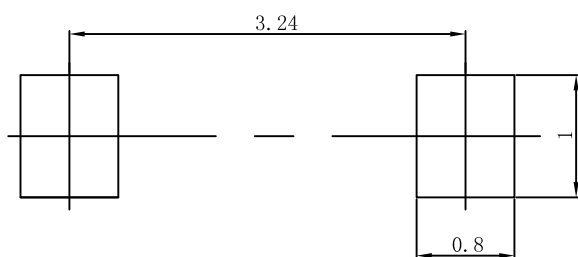




SOD-123 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.450	0.650	0.018	0.026
c	0.080	0.150	0.003	0.006
D	1.500	1.700	0.059	0.067
E	2.600	2.800	0.102	0.110
E1	3.550	3.850	0.140	0.152
L	0.500 REF		0.020 REF	
L1	0.250	0.450	0.010	0.018
θ	0°	8°	0°	8°



Note:

- 1.Controlling dimension:in millimeters.
- 2.General tolerance:± 0.05mm.
- 3.The pad layout is for reference purposes only.



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