SMBJ5245

SURFACE MOUNT SILICON ZENER DIODES

V_Z : 15 Volts
P_D : 1 Watts

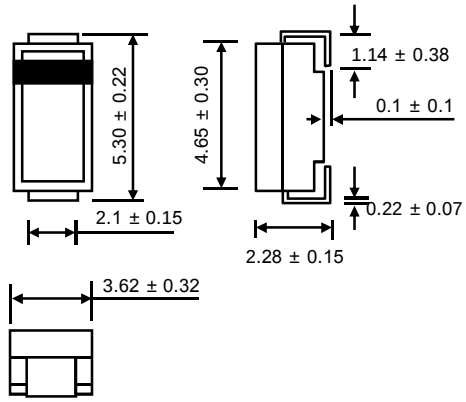
FEATURES :

* Glass passivated junction chip
* High peak reverse power dissipation
* High reliability
* Low leakage current
* Pb / RoHS Free

MECHANICAL DATA

* Case : SMB (DO-214AA) Molded plastic
* Epoxy : UL94V-O rate flame retardant
* Lead : Lead formed for Surface mount
* Polarity : Color band denotes cathode end
* Mounting position : Any
* Weight : 0.093 gram

SMB (DO-214AA)



Dimensions in millimeters

MAXIMUM RATINGS (Rating at 25 °C ambient temperature unless otherwise specified)

Rating	Symbol	Value	Unit
Maximum Power Dissipation @ T_L = 100 ºC	P_D	1.0	W
Derate above 100 ºC		20	mW/ºC
Maximum Forward Voltage at I_F = 200 mA	V_F	1.1	V
Typical Thermal Resistance, Junction to Lead at mounting plane	$R_{\Theta JL}$	50	°C/W
Operating and Storage Temperature Range	T_J, T_{STG}	- 55 to + 150	°C

ELECTRICAL CHARACTERISTICS (Rating at 25 °C ambient temperature unless otherwise specified)

Type No.	Nominal(1) Zener Voltage V_Z @ I_{ZT}	Test Current I_{ZT}	Maximum Zener Impedance A & B Suffix Only (Note 2)		Maximum Reverse Leakage Current A,B,C Suffix Only I_R @ V_R			Non-Suffix I_R @ V_R Use For Sufix A	Maximum Temp. coefficient of Zener Voltage (A & B Suffix Only) αvz
			Z_{ZT} @ I_{ZT}	Z_{ZT} @ I_{ZT} = 0.25 mA	(µA)	(V)			
	(V)	(mA)	(Ω)	(Ω)		A	B,C	(µA)	(% / °C)
SMBJ5245	15	8.5	16	600	0.1	10.5	11	10.0	+0.082

Note :

(1) The type number shown have a standard tolerance on the nominal zener voltage of ± 20%.Suffix A denotes a ± 10% tolerance, Suffix B denotes a ± 5% tolerance, Suffix C denotes a ± 2% tolerance.The electrical characteristics are measured after allowing the device to stabilize for 20 seconds when mounted on a heat sink.

(2) The zener impedance is derived from the 60 Hz ac voltage,which results when an ac current having an r.m.s. value equal to 10% of the da zener current (IZT or IZK) is superimposed on IZT or IZK. Zener impedance is measured at two point to insure a sharp knee on the breakdown curve, there by eliminating unstable units.