



Features

- Complete voltage range 3.3 to 200 V
- Withstands large surge stresses
- Available on tape and reel
- High surge current rating
- ESD protection up to 10kV; IEC61000-4-2

Mechanical Data

- Case: SMB molded plastic
- Molding compound, UL flammability classification rating 94V-0
- Polarity: Color band denotes cathode end

**RoHS
Compliant**

Maximum Ratings (@TA=25°C unless otherwise specified)

Parameter	Symbol	Value	Units
Power dissipation at TL=75°C	P _{tot}	3.0	W
Forward voltage @IF=200mA	V _F	1.5	V
Typical thermal resistance	R _{θJL} R _{θJA}	25 226	°C/W
Junction temperature	T _J	-50 to +150	°C
Storage temperature range	T _{STG}		

Electrical Characteristics (@TA=25°C unless otherwise specified)

Part Number	Device marking code	Zener voltage	Test current	Dynamic impedance	Knee current	Knee impedance	Reverse current	Reverse voltage	Max. DC current
		V _Z	I _{ZT}	Z _{ZT}	I _{ZK}	Z _{ZK}	I _{R(Max.)}	V _R	I _{ZM}
		V	m A	Ω	m A	Ω	μ A dc	V	m A
MP009047	927B	12	31.2	6.5	0.25	550	1	9.1	125
MP009048	928B	13	28.8	7		550		9.9	115
MP009049	929B	15	25	9		600		11.4	100
MP009050	930B	16	23.4	10		600		12.2	93
MP009051	931B	18	20.8	12		650		13.7	83
MP009052	932B	20	18.7	14		650		15.2	75
MP009053	934B	24	15.6	19		700		18.2	62
MP009054	935B	27	13.9	23		700		20.6	55
MP009055	936B	30	12.5	28		750		22.8	50
MP009056	937B	33	11.4	33		800		25.1	45
MP009057	938B	36	10.4	38		850		27.4	41
MP009058	939B	39	9.6	45		900		29.7	38
MP009059	942B	51	7.3	70		1100		38.8	29
MP009060	943B	56	6.7	86		1300		42.6	26

Part Number	Device marking code	Zener voltage	Test current	Dynamic impedance	Knee current	Knee impedance	Reverse current	Reverse voltage	Max. DC current
		V_Z	I_{ZT}	Z_{ZT}	I_{ZK}	Z_{ZK}	$I_R(\text{Max.})$	V_R	I_{ZM}
		V	m A	Ω	m A	Ω	μA dc	V	m A
MP009061	944B	62	6	100	0.25	1500	1	47.1	24
MP009062	945B	68	5.5	120		1700		51.2	22
MP009063	946B	75	5	140		2000		56	20
MP009064	947B	82	4.6	160		2500		62.2	18
MP009065	948B	91	4.1	200		3000		69.2	16
MP009066	949B	100	3.7	250		3100		76	15
MP009067	955B	180	2.1	900		7000		136.8	8

Notes:

*1: No suffix indicates a $\pm 20\%$ tolerance on nominal V_Z . Suffix A denotes a $\pm 10\%$ tolerance, B denotes a $\pm 5\%$ tolerance, C denotes a $\pm 2\%$ tolerance, and D denotes a $\pm 1\%$ tolerance.

*2: Zener voltage (V_Z) is measured at $T_L=30^\circ\text{C}$. Voltage measurement to be performed 90 seconds after application of dc current.

*3: The zener impedance is derived from the 60Hz ac voltage, which results when an ac current having an rms value equal to 10% of the dc zener current (I_{ZT} or I_{ZK}) is superimposed on I_{ZT} or I_{ZK} .

Ratings and Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)

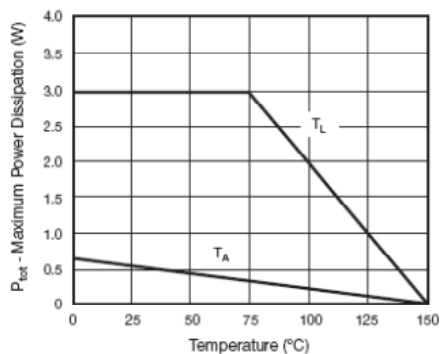


Fig. 1 - Steady State Power During

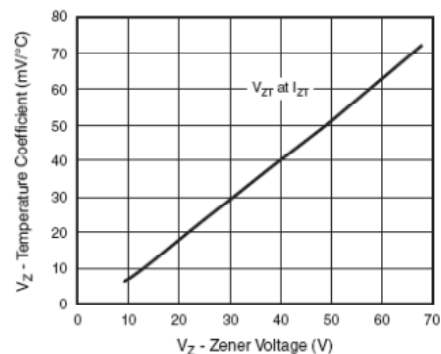


Fig. 3 - Typical Temperature Coefficients

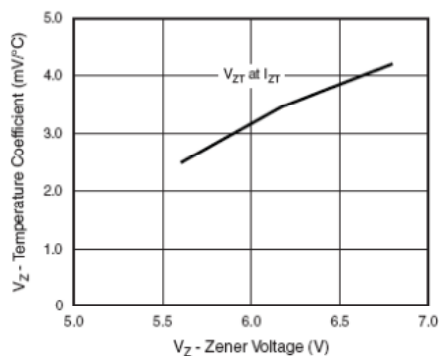


Fig. 2 - Typical Temperature Coefficients

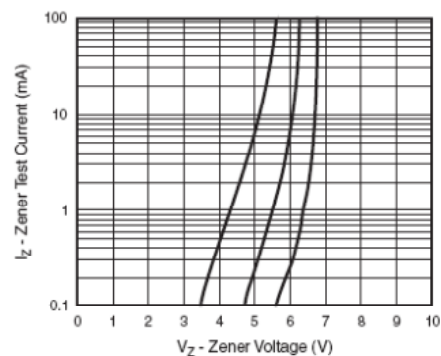
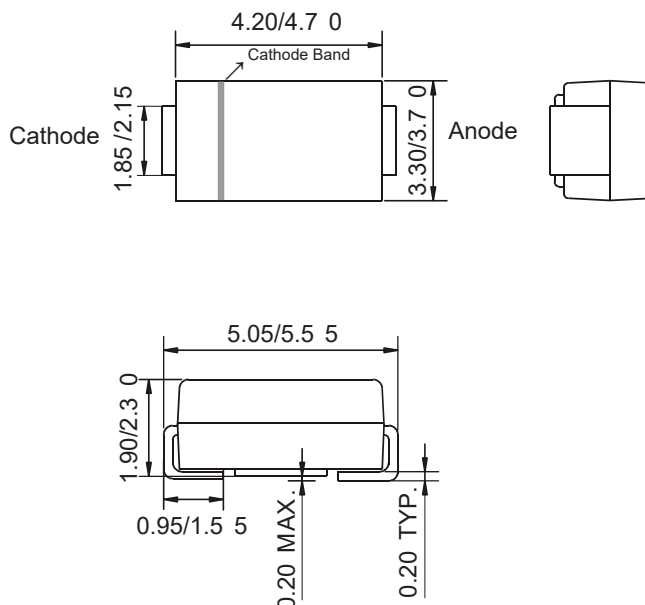
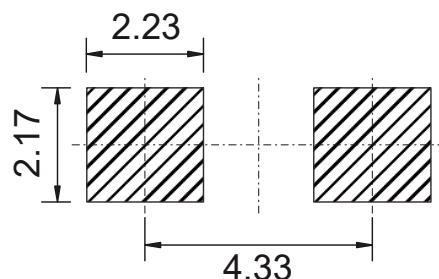


Fig. 4 - Typical Zener Voltage

Package Outline Dimensions



Mounting Pad Layout



Dimensions : Millimetres

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