SMA2EZ2.7D5-SMA2EZ100D5

ZENER 2W SERIES

SMA2EZ2.7D5 SMA2EZ100D5
V_Z : 2.7V - 100 Volts
P_D : 2 Watt

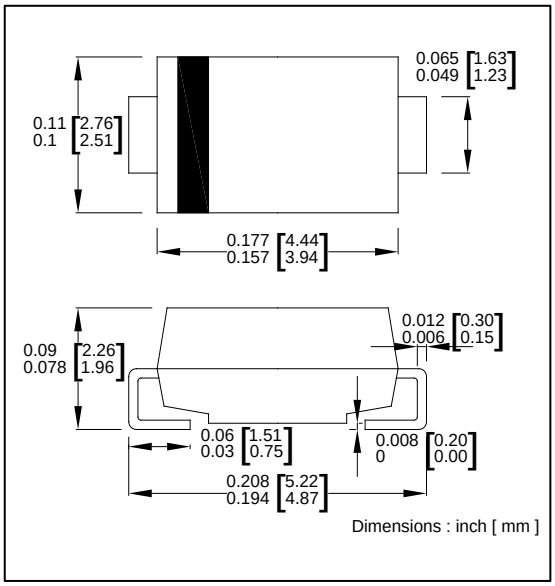
FEATURES

- Glass passivated chip
- Low leakage
- Built-in strain relief
- Low inductance
- High peak reverse power dissipation
- Lead (Pb)-free component
- For use in stabilizing and clipping circuits with high power rating

MECHANICAL DATA

- Case: Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead:Solderableper MIL-STD-750, method 2026
- Polarity: Color band denotes cathode end
- Mounting position: Any

SMA/DO214AC



RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specifi

Parameter	Symbol	Value	UNIT
DC Power Dissipation at T_L = 50 °C (Note1)	P_D	2.0	Watts
Peak pulse current wih a 10/1000μs waveform	V_F	1.5	Volts
Maximum Thermal Resistance Junction to Ambient	$R_{\Theta JA}$	170	K/W
Junction Temperature Range	TJ	- 55 to + 175	°C
Storage Temperature Range	T_{STG}	- 55 to + 175	°C

Note:

(1) TL = Lead temperature at 3/8 " (9.5mm) from body.

(2) Valid provided that leads are kept at ambient temperature at a distance of 10 mm from case.

Ratings And Characteristics Curves(T_A=25 °c unless otherwise noted)

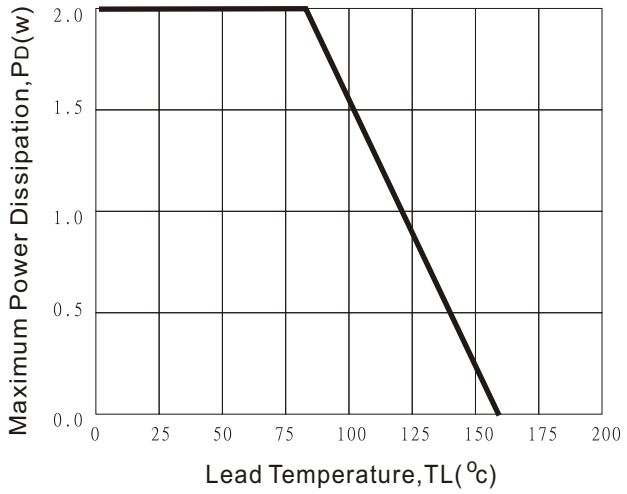


Fig1-Power Temperature Derating Curve

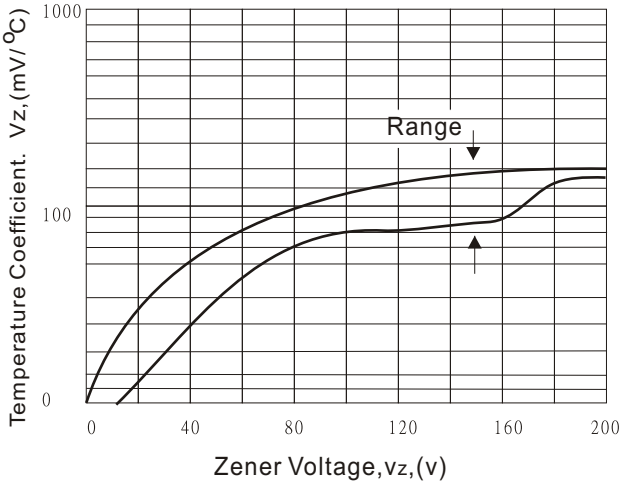


Fig.2- Temperature Coefficients v.s. Zener Volage

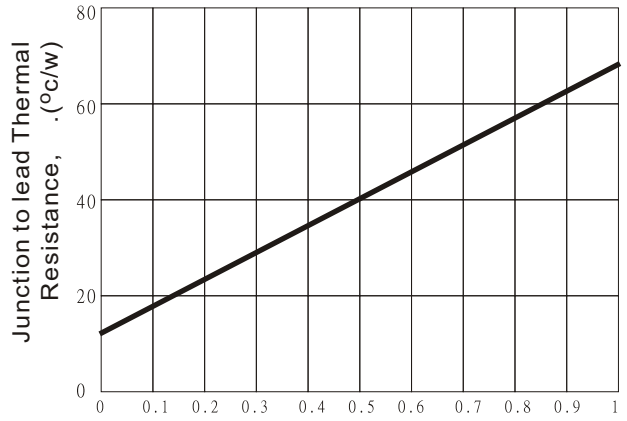
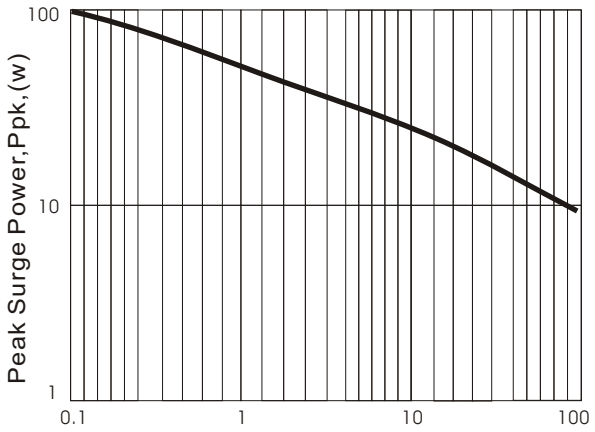
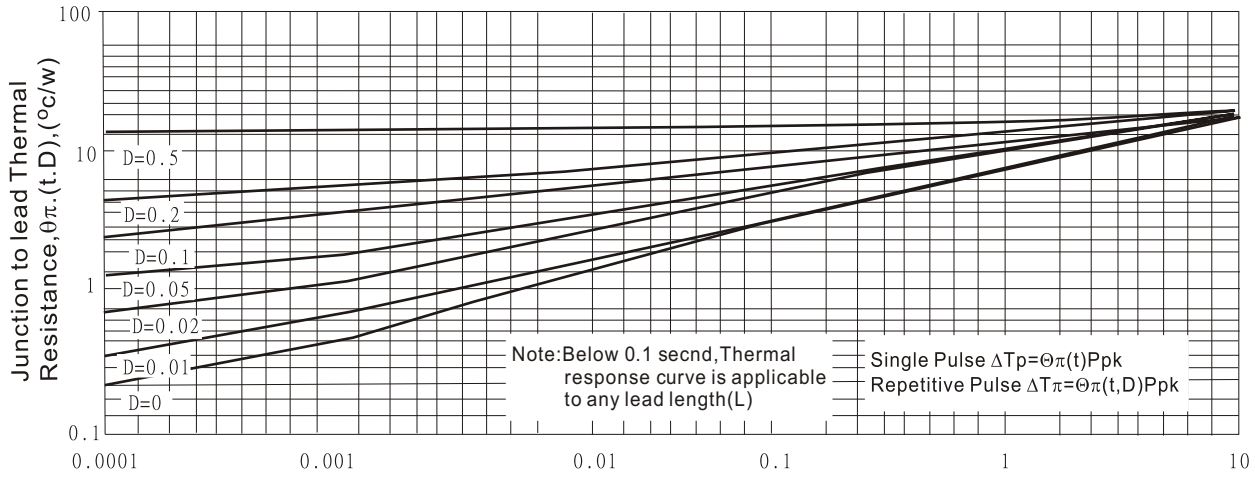


Fig.3 -Typical Thermal Resistance v.s Lead Length



Fig, 4 -Maximum Surge Power



Fig,5 - Typical Thermal Response L,Lead Length=3/8inch

Electrical Characteristics(T_A=25℃ unless otherwise noted)

ZENER 2W SERIES	Device Marking Code	Nominal Zener Voltage		Maximum Zener Impedance			Maximum Reverse Leakags Current		MAX.DC CURRENT I_{ZM}
		V_Z @I_{ZT}	I_{ZT}	Z_{ZT} @ I_{ZT}	Z_{ZK} @ I_{ZK}	I_{ZK}	I_R @ V_R		I_{ZM}
		Volts	m A	Ohms	Ohms	m A	uA	Volts	mA
SMA2EZ2.7D5	2H0	2.7	80.0	10	400	1.0	100	1.0	670
SMA2EZ3.0D5	2H1	3	160.0	8.0	400	1.0	100	1.0	603
SMA2EZ3.3D5	2H2	3.3	145.0	8.0	400	1.0	80	1.0	548
SMA2EZ3.6D5	2H3	3.6	139.0	5.0	400	1.0	80	1.0	502
SMA2EZ3.9D5	2H4	3.9	128.0	5.0	400	1.0	30	1.0	464
SMA2EZ4.3D5	2H5	4.3	116.0	4.5	400	1.0	20	1.0	421
SMA2EZ4.7D5	2H6	4.7	106.0	4.5	550	1.0	5.0	1.0	385
SMA2EZ5.1D5	2H7	5.1	98.0	3.5	600	1.0	5.0	1.0	354
SMA2EZ5.6D5	2H8	5.6	89.5	2.5	500	1.0	5.0	2.0	323
SMA2EZ6.2D5	2A0	6.2	80.5	1.5	700	1.0	5.0	3.0	292
SMA2EZ6.8D5	2A1	6.8	73.5	2.0	700	1.0	5.0	4.0	266
SMA2EZ7.5D5	2A2	7.5	66.5	2.0	700	0.5	5.0	5.0	242
SMA2EZ8.2D5	2A3	8.2	61.0	2.3	700	0.5	5.0	6.0	220
SMA2EZ9.1D5	2A4	9.1	55.0	2.5	700	0.5	3.0	7.0	200
SMA2EZ10D5	2A5	10	50.0	3.5	700	0.25	3.0	7.6	182
SMA2EZ11D5	2A6	11	45.5	4.0	700	0.25	1.0	8.4	166
SMA2ZE12D5	2A7	12	41.5	4.5	700	0.25	1.0	9.1	152
SMA2EZ13D5	2A8	13	38.5	5.0	700	0.25	0.5	9.9	138
SMA2EZ14D5	2A9	14	35.7	5.5	700	0.25	0.5	10.6	130
SMA2EZ15D5	2B0	15	33.4	7.0	700	0.25	0.5	11.4	122
SMA2EZ16D5	2B1	16	31.2	8.0	700	0.25	0.5	12.2	114
SMA2EZ17D5	2B2	17	29.4	9.0	750	0.25	0.5	13.0	107
SMA2EZ18D5	2B3	18	27.8	10.0	750	0.25	0.5	13.7	100
SMA2EZ19D5	2B4	19	26.3	11.0	750	0.25	0.5	14.4	95
SMA2EZ20D5	2B5	20	25.0	11.0	750	0.25	0.5	15.2	90
SMA2EZ22D5	2B6	22	22.8	12.0	750	0.25	0.5	16.7	82
SMA2EZ24D5	2B7	24	20.8	13.0	750	0.25	0.5	18.2	76
SMA2EZ27D5	2B8	27	18.5	18.0	750	0.25	0.5	20.6	68
SMA2EZ30D5	2B9	30	16.6	20.0	1000	0.25	0.5	22.5	60
SMA2EZ33D5	2C0	33	15.1	23.0	1000	0.25	0.5	25.1	55
SMA2EZ36D5	2C1	36	13.9	25.0	1000	0.25	0.5	27.4	50
SMA2EZ39D5	2C2	39	12.8	30.0	1000	0.25	0.5	29.7	47
SMA2EZ43D5	2C3	43	11.6	35.0	1500	0.25	0.5	32.7	43
SMA2EZ47D5	2C4	47	10.6	40.0	1500	0.25	0.5	35.8	39
SMA2EZ51D5	2C5	51	9.8	48.0	1500	0.25	0.5	38.8	36
SMA2EZ56D5	2C6	56	9.0	55.0	2000	0.25	0.5	42.6	32
SMA2EZ62D5	2C7	62	8.1	60.0	2000	0.25	0.5	47.1	29
SMA2EZ68D5	2C8	68	7.4	75.0	2000	0.25	0.5	51.7	27
SMA2EZ75D5	2C9	75	6.7	90.0	2000	0.25	0.5	56.0	24
SMA2EZ82D5	2F0	82	6.1	100.0	3000	0.25	0.5	62.2	22
SMA2EZ91D5	2F1	91	5.5	125.0	3000	0.25	0.5	69.2	20
SMA2EZ100D5	2F2	100	5.0	175.0	300	0.25	0.5	76.0	18

Notes :

(1) The type number listed have a standard tolerance on the nominal zener voltage of ± 5 %.

(2) The revese surge current is a non-repetitive, 8.3ms pulse width square wave or equivalent sine-wave superimposed on IZT per JEDEC Method