V_Z: 5.6 to 330 V
P_D: 2 W

Surface Mount Zener Diodes

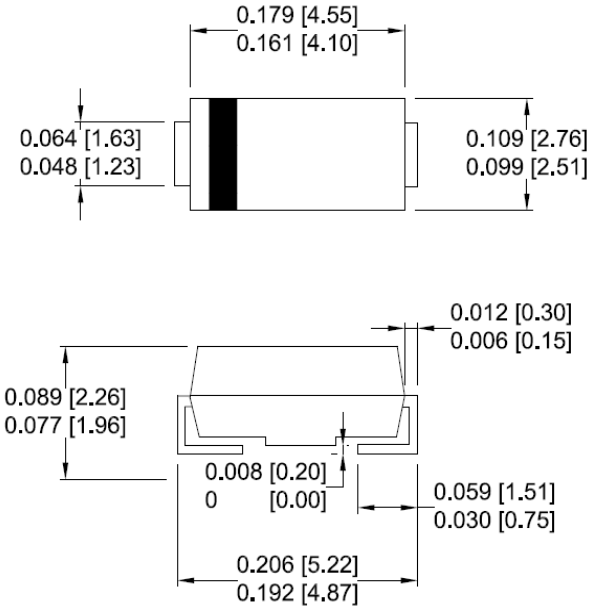
Features

- Glass passivated chip
- Low leakage
- Built-in strain relief
- Low inductance
- High peak reverse power dissipation
- For use in stabilizing and clipping circuits with high power rating
- RoHS compliant

Mechanical Data

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

SMA/ DO-214AC



Dimensions: inch[mm]

Maximum Ratings(T_A=25℃ unless otherwise noted)

Parameter	Symbol	Value	Unit
DC power dissipation at T_L = 75 °C	P_D	2	W
Maximum forward voltage at I_F = 200 mA	V_F	1.5	V
Junction temperature range	T_J	- 55 to + 150	°C
Storage temperature range	T_{STG}	- 55 to + 150	°C

Ratings and Characteristics Curves (T_A=25℃ unless otherwise noted)

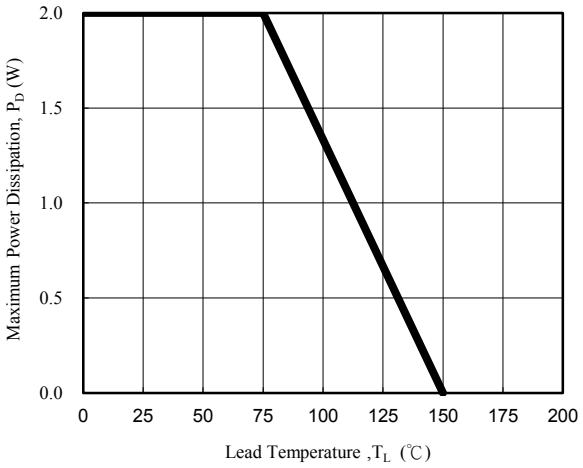


Fig. 1 - Power Temperature Derating Curve

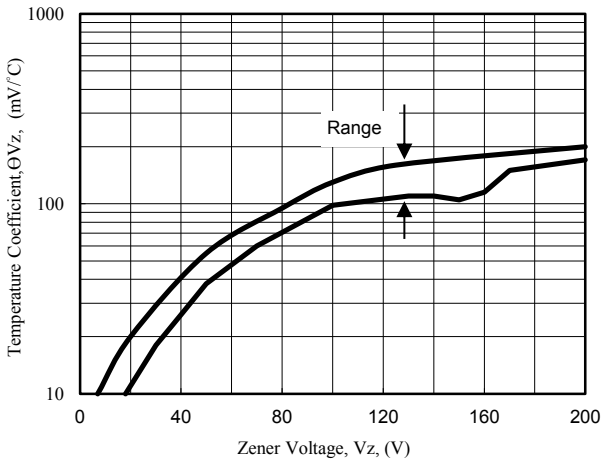


Fig. 2 - Temperature Coefficients v.s. Zener Voltage

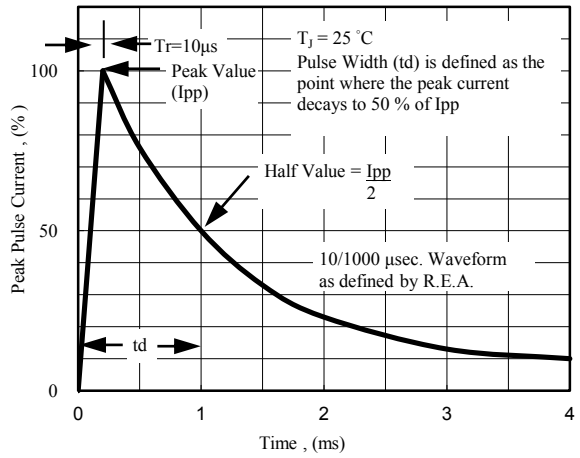


Fig. 3 - Pulse Waveform

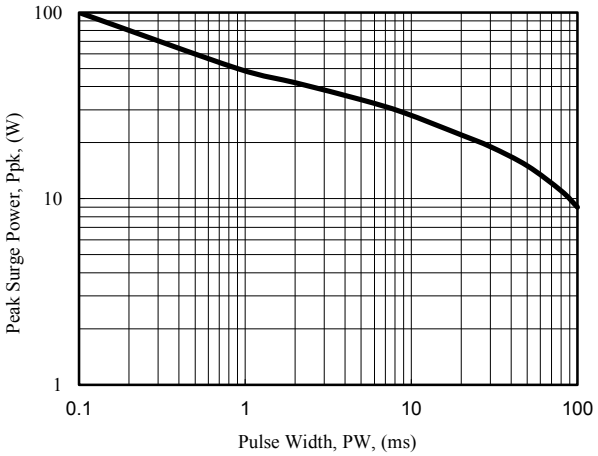


Fig. 4 - Maximum Surge Power

Electrical Characteristics(T_A=25℃ unless otherwise noted)

Part Number	Device Marking Code	Nominal Zener Voltage		Maximum Zener Impedance			Maximum Reverse Leakage Current		Maximum DC Zener Current
		V_Z @ I_{ZT}	I_{ZT}	Z_{ZT} @ I_{ZT}	Z_{ZK} @ I_{ZK}	I_{ZK}	I_R @ V_R		I_{ZM}
		(V)	(mA)	(Ω)	(Ω)	(mA)	(μA)	(V)	(mA)
SMA2EZ5.6D5	2H8	5.6	89.5	2.5	500	1.00	5.0	2.0	323
SMA2EZ6.2D5	2A0	6.2	80.5	1.5	700	1.00	5.0	3.0	292
SMA2EZ6.8D5	2A1	6.8	73.5	2.0	700	1.00	5.0	4.0	266
SMA2EZ7.5D5	2A2	7.5	66.5	2.0	700	0.50	5.0	5.0	242
SMA2EZ8.2D5	2A3	8.2	61.0	2.3	700	0.50	5.0	6.0	220
SMA2EZ9.1D5	2A4	9.1	55.0	2.5	700	0.50	3.0	7.0	200
SMA2EZ10D5	2A5	10.0	50.0	3.5	700	0.25	3.0	7.6	182
SMA2EZ11D5	2A6	11.0	45.5	4.0	700	0.25	1.0	8.4	166
SMA2EZ12D5	2A7	12.0	41.5	4.5	700	0.25	1.0	9.1	152
SMA2EZ13D5	2A8	13.0	38.5	5.0	700	0.25	0.5	9.9	138
SMA2EZ14D5	2A9	14.0	35.7	5.5	700	0.25	0.5	10.6	130
SMA2EZ15D5	2B0	15.0	33.4	7.0	700	0.25	0.5	11.4	122
SMA2EZ16D5	2B1	16.0	31.2	8.0	700	0.25	0.5	12.2	114
SMA2EZ17D5	2B2	17.0	29.4	9.0	750	0.25	0.5	13.0	107
SMA2EZ18D5	2B3	18.0	27.8	10.0	750	0.25	0.5	13.7	100
SMA2EZ19D5	2B4	19.0	26.3	11.0	750	0.25	0.5	14.4	95
SMA2EZ20D5	2B5	20.0	25.0	11.0	750	0.25	0.5	15.2	90
SMA2EZ22D5	2B6	22.0	22.8	12.0	750	0.25	0.5	16.7	82
SMA2EZ24D5	2B7	24.0	20.8	13.0	750	0.25	0.5	18.2	76
SMA2EZ27D5	2B8	27.0	18.5	18.0	750	0.25	0.5	20.6	68
SMA2EZ30D5	2B9	30.0	16.6	20.0	1000	0.25	0.5	22.5	60
SMA2EZ33D5	2C0	33.0	15.1	23.0	1000	0.25	0.5	25.1	55
SMA2EZ36D5	2C1	36.0	13.9	25.0	1000	0.25	0.5	27.4	50
SMA2EZ39D5	2C2	39.0	12.8	30.0	1000	0.25	0.5	29.7	47
SMA2EZ43D5	2C3	43.0	11.6	35.0	1500	0.25	0.5	32.7	43
SMA2EZ47D5	2C4	47.0	10.6	40.0	1500	0.25	0.5	35.8	39
SMA2EZ51D5	2C5	51.0	9.8	48.0	1500	0.25	0.5	38.8	36
SMA2EZ56D5	2C6	56.0	9.0	55.0	2000	0.25	0.5	42.6	32
SMA2EZ62D5	2C7	62.0	8.1	60.0	2000	0.25	0.5	47.1	29
SMA2EZ68D5	2C8	68.0	7.4	75.0	2000	0.25	0.5	51.7	27
SMA2EZ75D5	2C9	75.0	6.7	90.0	2000	0.25	0.5	56.0	24
SMA2EZ82D5	2F0	82.0	6.1	100.0	3000	0.25	0.5	62.2	22
SMA2EZ91D5	2F1	91.0	5.5	125.0	3000	0.25	0.5	69.2	20
SMA2EZ100D5	2F2	100.0	5.0	175.0	3000	0.25	0.5	76.0	18
SMA2EZ110D5	2F3	110.0	4.5	250.0	4000	0.25	0.5	83.6	17
SMA2EZ120D5	2F4	120.0	4.2	325.0	4500	0.25	0.5	91.2	15
SMA2EZ130D5	2F5	130.0	3.8	400.0	5000	0.25	0.5	98.8	14
SMA2EZ140D5	2F6	140.0	3.6	500.0	5500	0.25	0.5	106.4	13
SMA2EZ150D5	2F7	150.0	3.3	575.0	6000	0.25	0.5	114.0	12
SMA2EZ160D5	2F8	160.0	3.1	650.0	6500	0.25	0.5	121.6	11
SMA2EZ170D5	2F9	170.0	2.9	675.0	7000	0.25	0.5	130.4	11
SMA2EZ180D5	2G1	180.0	2.8	725.0	7000	0.25	0.5	136.8	10
SMA2EZ190D5	2G2	190.0	2.6	825.0	8000	0.25	0.5	144.8	10
SMA2EZ200D5	2G3	200.0	2.5	1900.0	9990	0.25	0.5	152.0	9
SMA2EZ220D5	2G4	220	2.0	2000	8500	0.25	0.5	167.0	8.0
SMA2EZ270D5	2G5	270	1.6	2200	8500	0.25	0.5	205.0	6.7
SMA2EZ300D5	2G6	300	1.5	2200	9000	0.25	0.5	228.0	5.9
SMA2EZ330D5	2G7	330	1.4	2300	9000	0.25	0.5	250.0	5.4

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