SMA2EZ3.3D5 THRU SMA2EZ270D5

GLASS PASSIVATED JUNCTION SILICON ZENER DIODES
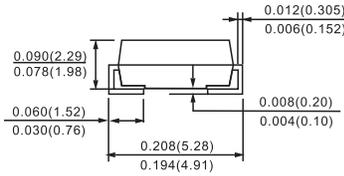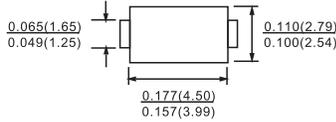**Reverse Voltage -** *3.3 to 270 Volts*   **Power -** *2.0 Watts*

FEATURES

* Complete Voltage Range 3.3 to 270 Volts
* High peak reverse power dissipation
* High reliability
* Low leakage current

DO-214AC(SMA)

0.065(1.65)
0.049(1.25)

0.110(2.79)
0.100(2.54)

0.177(4.50)
0.157(3.99)

0.012(0.305)
0.006(0.152)

0.090(2.29)
0.078(1.98)

0.008(0.20)
0.004(0.10)

0.060(1.52)
0.030(0.76)

0.208(5.28)
0.194(4.91)

Dimensions in inches and (millimeters)

MECHANICAL DATA

* Case : SMA Molded plastic
* Epoxy : UL94V-O rate flame retardant
* Lead : Axial lead solderable per MIL-STD-202,
          method 208 guaranteed
* Polarity : Color band denotes cathode end
* Mounting position : Any
* Weight : 0.339 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified

Rating	Symbol	Value	Unit
DC Power Dissipation at T_L = 75 °C (Note1)	P_D	2.0	W
Maximum Forward Voltage at I_F = 200 mA	V_F	1.2	V
Junction Temperature Range	T_J	- 55 to + 175	°C
Storage Temperature Range	Ts	- 55 to + 175	°C

Note :
   (1) T_L = Lead temperature at 3/8 " (9.5mm) from body

Fig. 1 POWER TEMPERATURE DERATING CURVE

L = 3/8" (9.5mm)

P_D, MAXIMUM DISSIPATION (WATTS)

T_L, LEAD TEMPERATURE (°C)

GENERAL SEMICONDUCTOR®
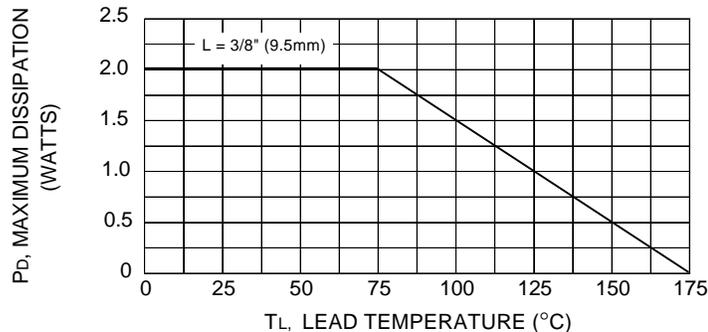
Rating at 25 C ambient temperature unless otherwise specified

TYPE	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)
SMA2EZ3.3D5	3.3	150	5.0	400	1.0	80	1.0	545
SMA2EZ3.6D5	3.6	139	5.0	400	1.0	80	1.0	504
SMA2EZ3.9D5	3.9	128	5.0	400	1.0	50	1.0	468
SMA2EZ4.3D5	4.3	116	4.5	400	1.0	50	1.0	434
SMA2EZ4.7D5	4.7	106	4.5	550	1.0	50	1.0	386
SMA2EZ5.1D5	5.1	98.0	3.5	600	1.0	50	1.0	356
SMA2EZ5.6D5	5.6	89.5	2.5	500	1.0	50	2.0	324
SMA2EZ6.2D5	6.2	80.5	1.5	700	1.0	50	3.0	292
SMA2EZ6.5D5	6.5	77.0	1.7	700	1.0	50	3.5	278
SMA2EZ6.8D5	6.8	73.5	2.0	700	1.0	50	4.0	266
SMA2EZ7.5D5	7.5	66.5	2.0	700	0.5	50	5.0	242
SMA2EZ8.2D5	8.2	61.0	2.3	700	0.5	50	6.0	220
SMA2EZ9.1D5	9.1	55.0	2.5	700	0.5	50	7.0	200
SMA2EZ10D5	10	50.0	3.5	700	0.25	50	7.6	182
SMA2EZ11D5	11	45.5	4.0	700	0.25	50	8.4	166
SMA2EZ12D5	12	41.5	4.5	700	0.25	1.0	9.1	152
SMA2EZ13D5	13	38.5	5.0	700	0.25	0.5	9.9	138
SMA2EZ14D5	14	35.7	5.5	700	0.25	0.5	10.6	130
SMA2EZ15D5	15	33.4	7.0	700	0.25	0.5	11.4	122
SMA2EZ16D5	16	31.2	8.0	700	0.25	0.5	12.2	114
SMA2EZ17D5	17	29.4	9.0	750	0.25	0.5	13.0	107
SMA2EZ18D5	18	27.8	10	750	0.25	0.5	13.7	100
SMA2EZ19D5	19	26.3	11	750	0.25	0.5	14.4	95
SMA2EZ20D5	20	25.0	11	750	0.25	0.5	15.2	90
SMA2EZ22D5	22	22.8	12	750	0.25	0.5	16.7	82
SMA2EZ24D5	24	20.8	13	750	0.25	0.5	18.2	76
SMA2EZ27D5	27	18.5	18	750	0.25	0.5	20.6	68
SMA2EZ30D5	30	16.6	20	1000	0.25	0.5	22.5	60
SMA2EZ33D5	33	15.1	23	1000	0.25	0.5	25.1	55
SMA2EZ36D5	36	13.9	25	1000	0.25	0.5	27.4	50
SMA2EZ39D5	39	12.8	30	1000	0.25	0.5	29.7	47
SMA2EZ43D5	43	11.6	35	1500	0.25	0.5	32.7	43
SMA2EZ47D5	47	10.6	40	1500	0.25	0.5	35.8	39
SMA2EZ51D5	51	9.8	48	1500	0.25	0.5	38.8	36
SMA2EZ56D5	56	9.0	55	2000	0.25	0.5	42.6	32
SMA2EZ62D5	62	8.1	60	2000	0.25	0.5	47.1	29
SMA2EZ68D5	68	7.4	75	2000	0.25	0.5	51.7	27
SMA2EZ75D5	75	6.7	90	2000	0.25	0.5	56.0	24
SMA2EZ82D5	82	6.1	100	3000	0.25	0.5	62.2	22
SMA2EZ91D5	91	5.5	125	3000	0.25	0.5	69.2	20
SMA2EZ100D5	100	5.0	175	3000	0.25	0.5	76.0	18
SMA2EZ110D5	110	4.5	250	4000	0.25	0.5	83.6	17
SMA2EZ120D5	120	4.2	325	4500	0.25	0.5	91.2	15
SMA2EZ130D5	130	3.8	400	5000	0.25	0.5	98.8	14
SMA2EZ140D5	140	3.6	500	5500	0.25	0.5	106.4	13
SMA2EZ150D5	150	3.3	575	6000	0.25	0.5	114.0	12
SMA2EZ160D5	160	3.1	650	6500	0.25	0.5	121.6	11
SMA2EZ170D5	170	2.9	675	7000	0.25	0.5	130.4	11
SMA2EZ180D5	180	2.8	725	7000	0.25	0.5	136.8	10
SMA2EZ190D5	190	2.6	825	8000	0.25	0.5	144.8	10
SMA2EZ200D5	200	2.5	900	8000	0.25	0.5	152.0	9.0
SMA2EZ220D5	220	2.0	2000	8500	0.25	0.5	167.0	8.0
SMA2E Z270D5	270	1.6	2200	8500	0.25	0.5	205.0	6.7

Notes : (1) Suffix " 5 " indicates ± 5% tolerance, suffix " 10 " indicates ± 10% tolerance.
(2) " EZ " will be omitted in marking on the diode