SMAZ5913B - SMAZ5957B

SURFACE MOUNT SILICON ZENER DIODES

VOLTAGE RANGE: 3.3 - 240V
POWER: 1.5Watts

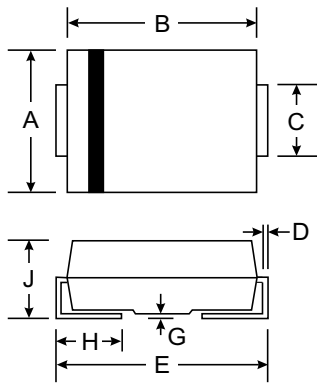
Features

- Complete Voltage Range 3.3 to 240 Volts
- High peak reverse power dissipation
- High reliability
- Low leakage current

Mechanical Data

- Case: SMA/DO-214AC, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.064 grams (approx.)

RoHS COMPLIANT

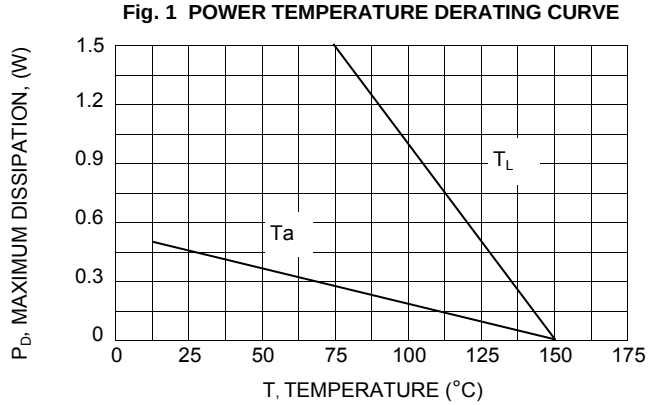


SMA(DO-214AC)		
Dim	**Min**	**Max**
A	2.29	2.92
B	4.00	4.60
C	1.27	1.63
D	0.15	0.31
E	4.80	5.59
G	0.10	0.20
H	0.76	1.52
J	2.01	2.62
All Dimensions in mm		

Maximum Ratings T_A = 25°C unless otherwise specified

Rating	Symbol	Value	Unit
DC Power Dissipation @ T_L = 75 °C	P_D	1.5	W
Measured zero lead length(1" square copper pad, FR-4 board) Derate above 75 °C		20	mW/°C
Thermal Resistance Junction to Lead	$R_{\Theta JL}$	50	°C/W
DC Power Dissipation @ Ta = 25 °C	P_D	0.5	W
(FR-4 board) Derate above 25 °C		4.0	mW/°C
Thermal Resistance Junction to Ambient	$R_{\Theta JA}$	250	°C/W
Maximum Forward Voltage at I_F = 200 mA	V_F	1.5	V
Operating Junction and Storang Temperature Range	T_J, T_{STG}	- 65 to + 150	°C

Fig. 1 POWER TEMPERATURE DERATING CURVE



ELECTRICAL CHARACTERISTICS 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)
SMAZ5913B	3.3	113.6	10	500	1.0	100	1.0	454
SMAZ5914B	3.6	104.2	9.0	500	1.0	75	1.0	416
SMAZ5915B	3.9	96.1	7.5	500	1.0	25	1.0	384
SMAZ5916B	4.3	87.2	6.0	500	1.0	5.0	1.0	348
SMAZ5917B	4.7	79.8	5.0	500	1.0	5.0	1.5	319
SMAZ5918B	5.1	73.5	4.0	350	1.0	5.0	2.0	294
SMAZ5919B	5.6	66.9	2.0	250	1.0	5.0	3.0	267
SMAZ5920B	6.2	60.5	2.0	200	1.0	5.0	4.0	241
SMAZ5921B	6.8	55.1	2.5	200	1.0	50	5.2	220
SMAZ5922B	7.5	50.0	3.0	400	0.5	50	6.0	200
SMAZ5923B	8.2	45.7	3.5	400	0.5	50	6.5	182
SMAZ5924B	9.1	41.2	4.0	500	0.5	50	7.0	164
SMAZ5925B	10	37.5	4.5	500	0.25	50	8.0	150
SMAZ5926B	11	34.1	5.5	550	0.25	50	8.4	136
SMAZ5927B	12	31.2	6.5	550	0.25	1.0	9.1	125
SMAZ5928B	13	28.8	7.0	550	0.25	1.0	9.9	115
SMAZ5929B	15	25.0	9.0	600	0.25	1.0	11.4	100
SMAZ5930B	16	23.4	10	600	0.25	1.0	12.2	93
SMAZ5931B	18	20.8	12	650	0.25	1.0	13.7	83
SMAZ5932B	20	18.7	14	650	0.25	1.0	15.2	75
SMAZ5933B	22	17.0	17.5	650	0.25	1.0	16.7	68
SMAZ5934B	24	15.6	19	700	0.25	1.0	18.2	62
SMAZ5935B	27	13.9	23	700	0.25	1.0	20.6	55
SMAZ5936B	30	12.5	26	750	0.25	1.0	22.8	50
SMAZ5937B	33	11.4	33	800	0.25	1.0	25.1	45
SMAZ5938B	36	10.4	38	850	0.25	1.0	27.4	41
SMAZ5939B	39	9.6	45	900	0.25	1.0	29.7	38
SMAZ5940B	43	8.7	53	950	0.25	1.0	32.7	34
SMAZ5941B	47	8.0	67	1000	0.25	1.0	35.8	31
SMAZ5942B	51	7.3	70	1100	0.25	1.0	38.8	29
SMAZ5943B	56	6.7	86	1300	0.25	1.0	42.6	26
SMAZ5944B	62	6.0	100	1500	0.25	1.0	47.1	24
SMAZ5945B	68	5.5	120	1700	0.25	1.0	51.7	22
SMAZ5946B	75	5.0	140	2000	0.25	1.0	56.0	20
SMAZ5947B	82	4.6	160	2500	0.25	1.0	62.2	18
SMAZ5948B	91	4.1	200	3000	0.25	1.0	69.2	16
SMAZ5949B	100	3.7	250	3100	0.25	1.0	76.0	15
SMAZ5950B	110	3.4	300	4000	0.25	1.0	83.6	13
SMAZ5951B	120	3.1	380	4500	0.25	1.0	91.2	12
SMAZ5952B	130	2.9	450	5000	0.25	1.0	98.8	11
SMAZ5953B	150	2.5	600	6000	0.25	1.0	114.0	10
SMAZ5954B	160	2.3	700	6500	0.25	1.0	121.6	9.0
SMAZ5955B	180	2.1	900	7000	0.25	1.0	136.8	8.0
SMAZ5956B	200	1.9	1200	8000	0.25	1.0	152.0	7.0
SMAZ5957B	240	1.5	1600	9000	0.25	1.0	182.4	6.0

Note :

(1) Suffix " B " indicates ± 5% tolerance suffix " A " indicates ± 10% tolerance.