

ZENER DIODES

V_z : 3.9 - 200 Volts

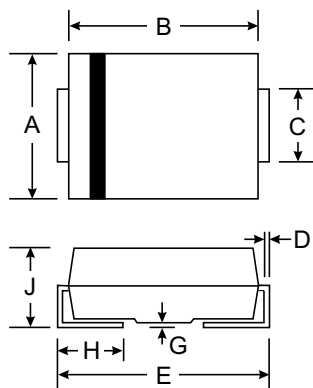
P_D : 3 Watts

Features

- Complete Voltage Range 3.9 to 200 Volts
- High peak reverse power dissipation
- High reliability
- Low leakage current

Mechanical Data

- Case : SMA (DO-214AC) Molded plastic
- Epoxy : UL94V-O rate flame retardant
- Lead : Lead formed for Surface mount
- Polarity : Color band denotes cathode end
- Mounting position : Any
- Weight: 0.064 grams (approx.)

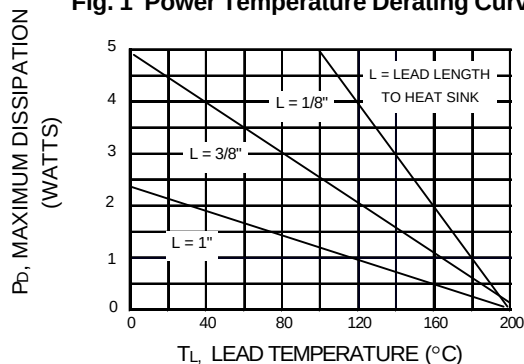


SMA(DO-214AC)		
Dim	Min	Max
A	2.29	2.92
B	4.00	4.60
C	1.27	1.63
D	0.15	0.31
E	4.80	5.59
G	0.10	0.20
H	0.76	1.52
J	2.01	2.62
All Dimensions in mm		

MAXIMUM RATINGS Rating at 25 °C ambient temperature unless otherwise specified

Rating	Symbol	Value	Unit
DC Power Dissipation at $T_L = 75^\circ\text{C}$ (Note1)	P_D	3.0	Watts
Maximum Forward Voltage at $I_F = 200\text{ mA}$	V_F	1.2	Volts
Junction Temperature Range	T_J	- 55 to + 150	$^\circ\text{C}$
Storage Temperature Range	T_S	- 55 to + 150	$^\circ\text{C}$

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)
BZG03C3V9	3.9	192	4.5	400	1.0	80	1.0	630
BZG03C4V3	4.3	174	4.5	400	1.0	30	1.0	590
BZG03C4V7	4.7	160	4.0	500	1.0	20	1.0	550
BZG03C5V1	5.1	147	3.5	550	1.0	5.0	1.0	520
BZG03C5V6	5.6	134	2.5	600	1.0	5.0	2.0	480
BZG03C6V2	6.2	121	1.5	700	1.0	5.0	3.0	435
BZG03C6V8	6.8	110	2.0	700	1.0	50	4.0	393
BZG03C7V5	7.5	100	2.0	700	0.5	50	5.0	360
BZG03C8V2	8.2	91	2.3	700	0.5	50	6.0	330
BZG03C9V1	9.1	82	2.5	700	0.5	50	7.0	297
BZG03C10	10	75	3.5	700	0.3	50	7.6	270
BZG03C11	11	68	4.0	700	0.25	50	8.4	225
BZG03C12	12	63	4.5	700	0.25	1.0	9.1	246
BZG03C13	13	58	4.5	700	0.25	0.5	9.1	208
BZG03C14	14	53	5.0	700	0.25	0.5	10.6	193
BZG03C15	15	50	5.5	700	0.25	0.5	11.4	180
BZG03C16	16	47	5.5	700	0.25	0.5	12.2	169
BZG03C17	17	44	6.0	750	0.25	0.5	13.0	159
BZG03C18	18	42	6.0	750	0.25	0.5	13.7	150
BZG03C19	19	40	7.0	750	0.25	0.5	14.4	142
BZG03C20	20	37	7.0	750	0.25	0.5	15.2	135
BZG03C22	22	34	8.0	750	0.25	0.5	16.7	123
BZG03C24	24	31	9.0	750	0.25	0.5	18.2	112
BZG03C27	27	28	10	750	0.25	0.5	20.6	100
BZG03C28	28	27	12	750	0.25	0.5	21.0	96
BZG03C30	30	25	16	1000	0.25	0.5	22.5	90
BZG03C33	33	23	20	1000	0.25	0.5	25.1	82
BZG03C36	36	21	22	1000	0.25	0.5	27.4	75
BZG03C39	39	19	28	1000	0.25	0.5	29.7	69
BZG03C43	43	17	33	1500	0.25	0.5	32.7	63
BZG03C47	47	16	38	1500	0.25	0.5	35.6	57
BZG03C51	51	15	45	1500	0.25	0.5	38.8	53
BZG03C56	56	13	50	2000	0.25	0.5	42.6	48
BZG03C62	62	12	55	2000	0.25	0.5	47.1	44
BZG03C68	68	11	70	2000	0.25	0.5	51.7	40
BZG03C75	75	10	85	2000	0.25	0.5	56.0	36
BZG03C82	82	9.1	95	3000	0.25	0.5	62.2	33
BZG03C91	91	8.2	115	3000	0.25	0.5	69.2	30
BZG03C100	100	7.5	160	3000	0.25	0.5	76.0	27

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)
BZG03C110	110	6.8	225	4000	0.25	0.5	83.6	25
BZG03C120	120	6.3	300	4500	0.25	0.5	91.2	22
BZG03C130	130	5.8	375	5000	0.25	0.5	98.8	21
BZG03C140	140	5.3	475	5000	0.25	0.5	106.4	19
BZG03C150	150	5.0	550	6000	0.25	0.5	114.0	18
BZG03C160	160	4.7	625	6500	0.25	0.5	121.6	17
BZG03C170	170	4.4	650	7000	0.25	0.5	130.4	16
BZG03C180	180	4.2	700	7000	0.25	0.5	136.8	15
BZG03C190	190	4.0	800	8000	0.25	0.5	144.8	14
BZG03C200	200	3.7	875	8000	0.25	0.5	152.0	13

Notes :

- (1) Suffix "03C " indicates ± 5% tolerance, suffix " 03D " indicates ± 10% tolerance.