Z3SMA3V9 - Z3SMA400

SURFACE MOUNT SILICON ZENER DIODES

VOLTAGE RANGE: 3.9 - 400V
POWER: 3.0Watts



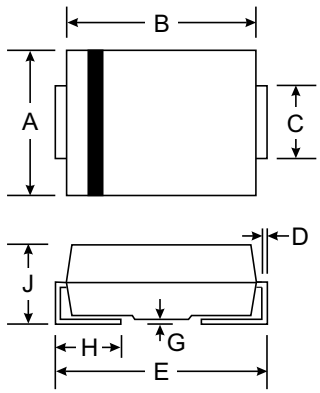
Features

- Complete Voltage Range 3.9 to 400 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 at T_L = 75 °C (Note1)	P_D	3.0	Watts
Maximum Forward Voltage at I_F = 200 mA	V_F	1.5	Volts
Maximum Thermal Resistance Junction to Ambient Air (Note2)	$R_{\theta JA}$	60	K / W
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

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

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)
Z3SMA3V9	3.9	192	4.5	400	1.0	80	1.0	630
Z3SMA4V3	4.3	174	4.5	400	1.0	30	1.0	590
Z3SMA4V7	4.7	160	4.0	500	1.0	20	1.0	550
Z3SMA5V1	5.1	147	3.5	550	1.0	5.0	1.0	520
Z3SMA5V6	5.6	134	2.5	600	1.0	5.0	2.0	480
Z3SMA6V2	6.2	121	1.5	700	1.0	5.0	3.0	435
Z3SMA6V8	6.8	110	2.0	700	1.0	50	4.0	393
Z3SMA7V5	7.5	100	2.0	700	0.5	50	5.0	360
Z3SMA8V2	8.2	91	2.3	700	0.5	50	6.0	330
Z3SMA9V1	9.1	82	2.5	700	0.5	50	7.0	297
Z3SMA10	10	75	3.5	700	0.3	50	7.6	270
Z3SMA11	11	68	4.0	700	0.25	50	8.4	225
Z3SMA12	12	63	4.5	700	0.25	1.0	9.1	246
Z3SMA13	13	58	4.5	700	0.25	0.5	9.1	208
Z3SMA14	14	53	5.0	700	0.25	0.5	10.6	193
Z3SMA15	15	50	5.5	700	0.25	0.5	11.4	180
Z3SMA16	16	47	5.5	700	0.25	0.5	12.2	169
Z3SMA17	17	44	6.0	750	0.25	0.5	13.0	159
Z3SMA18	18	42	6.0	750	0.25	0.5	13.7	150
Z3SMA19	19	40	7.0	750	0.25	0.5	14.4	142
Z3SMA20	20	37	7.0	750	0.25	0.5	15.2	135
Z3SMA22	22	34	8.0	750	0.25	0.5	16.7	123
Z3SMA24	24	31	9.0	750	0.25	0.5	18.2	112
Z3SMA27	27	28	10	750	0.25	0.5	20.6	100
Z3SMA28	28	27	12	750	0.25	0.5	21.0	96
Z3SMA30	30	25	16	1000	0.25	0.5	22.5	90
Z3SMA33	33	23	20	1000	0.25	0.5	25.1	82
Z3SMA36	36	21	22	1000	0.25	0.5	27.4	75
Z3SMA39	39	19	28	1000	0.25	0.5	29.7	69
Z3SMA43	43	17	33	1500	0.25	0.5	32.7	60
Z3SMA47	47	16	38	1500	0.25	0.5	35.6	57
Z3SMA51	51	15	45	1500	0.25	0.5	38.8	53
Z3SMA56	56	13	50	2000	0.25	0.5	42.6	48
Z3SMA62	62	12	55	2000	0.25	0.5	47.1	44
Z3SMA68	68	11	70	2000	0.25	0.5	51.7	40
Z3SMA75	75	10	85	2000	0.25	0.5	56.0	36
Z3SMA82	82	9.1	95	3000	0.25	0.5	62.2	33
Z3SMA91	91	8.2	115	3000	0.25	0.5	69.2	30
Z3SMA100	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)
Z3SMA110	110	6.8	225	4000	0.25	0.5	83.6	25
Z3SMA120	120	6.3	300	4500	0.25	0.5	91.2	22
Z3SMA130	130	5.8	375	5000	0.25	0.5	98.8	21
Z3SMA140	140	5.3	475	5000	0.25	0.5	106.4	19
Z3SMA150	150	5.0	550	6000	0.25	0.5	114.0	18
Z3SMA160	160	4.7	625	6500	0.25	0.5	121.6	17
Z3SMA170	170	4.4	650	7000	0.25	0.5	130.4	16
Z3SMA180	180	4.2	700	7000	0.25	0.5	136.8	15
Z3SMA190	190	4.0	800	8000	0.25	0.5	144.8	14
Z3SMA200	200	3.7	875	8000	0.25	0.5	152.0	13
Z3SMA220	220	3.4	1600	9000	0.25	1	167.0	12
Z3SMA240	240	3.1	1700	9000	0.25	1	182.0	11
Z3SMA270	270	2.8	1800	9000	0.25	1	205.0	10
Z3SMA300	300	2.5	1900	9000	0.25	1	228.0	9
Z3SMA330	330	2.3	2200	9000	0.25	1	251.0	8
Z3SMA360	360	2.1	2700	9000	0.25	1	274.0	8
Z3SMA400	400	1.9	3500	9000	0.25	1	304.0	7