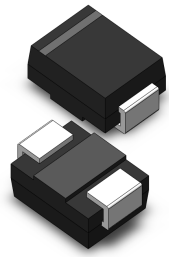
Z3SMB3V9 - Z3SMB400

SURFACE MOUNT SILICON ZENER DIODES

VOLTAGE RANGE: 3.9V - 400V
POWER: 3.0Watts



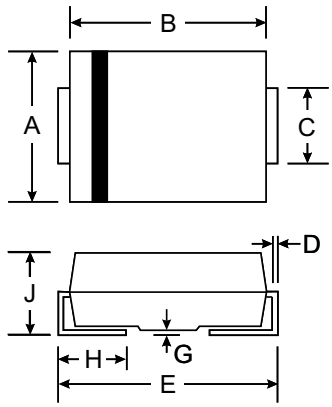
Features

- Complete Voltage Range 3.9 to 400 Volts
- High peak reverse power dissipation
- High reliability
- Low leakage current

Mechanical Data

- Case : SMB (DO-214AA) Molded plastic
- Epoxy : UL94V-O rate flame retardant
- Lead : Lead formed for Surface mount
- Polarity : Color band denotes cathode end
- Mounting position : Any
- Weight: 0.093 grams (approx.)

RoHS COMPLIANT



SMB(DO-214AA)		
Dim	**Min**	**Max**
A	3.30	3.94
B	4.06	4.70
C	1.91	2.21
D	0.15	0.31
E	5.00	5.59
G	0.10	0.20
H	0.76	1.52
J	2.00	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)
Z3SMB3V9	3.9	192	4.5	400	1.0	80	1.0	630
Z3SMB4V3	4.3	174	4.5	400	1.0	30	1.0	590
Z3SMB4V7	4.7	160	4.0	500	1.0	20	1.0	550
Z3SMB5V1	5.1	147	3.5	550	1.0	5.0	1.0	520
Z3SMB5V6	5.6	134	2.5	600	1.0	5.0	2.0	480
Z3SMB6V2	6.2	121	1.5	700	1.0	5.0	3.0	435
Z3SMB6V8	6.8	110	2.0	700	1.0	50	4.0	393
Z3SMB7V5	7.5	100	2.0	700	0.5	50	5.0	360
Z3SMB8V2	8.2	91	2.3	700	0.5	50	6.0	330
Z3SMB9V1	9.1	82	2.5	700	0.5	50	7.0	297
Z3SMB10	10	75	3.5	700	0.3	50	7.6	270
Z3SMB11	11	68	4.0	700	0.25	50	8.4	225
Z3SMB12	12	63	4.5	700	0.25	1.0	9.1	246
Z3SMB13	13	58	4.5	700	0.25	0.5	9.1	208
Z3SMB14	14	53	5.0	700	0.25	0.5	10.6	193
Z3SMB15	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
Z3SMB17	17	44	6.0	750	0.25	0.5	13.0	159
Z3SMB18	18	42	6.0	750	0.25	0.5	13.7	150
Z3SMB19	19	40	7.0	750	0.25	0.5	14.4	142
Z3SMB20	20	37	7.0	750	0.25	0.5	15.2	135
Z3SMB22	22	34	8.0	750	0.25	0.5	16.7	123
Z3SMB24	24	31	9.0	750	0.25	0.5	18.2	112
Z3SMB27	27	28	10	750	0.25	0.5	20.6	100
Z3SMB28	28	27	12	750	0.25	0.5	21.0	96
Z3SMB30	30	25	16	1000	0.25	0.5	22.5	90
Z3SMB33	33	23	20	1000	0.25	0.5	25.1	82
Z3SMB36	36	21	22	1000	0.25	0.5	27.4	75
Z3SMB39	39	19	28	1000	0.25	0.5	29.7	69
Z3SMB43	43	17	33	1500	0.25	0.5	32.7	60
Z3SMB47	47	16	38	1500	0.25	0.5	35.6	57
Z3SMB51	51	15	45	1500	0.25	0.5	38.8	53
Z3SMB56	56	13	50	2000	0.25	0.5	42.6	48
Z3SMB62	62	12	55	2000	0.25	0.5	47.1	44
Z3SMB68	68	11	70	2000	0.25	0.5	51.7	40
Z3SMB75	75	10	85	2000	0.25	0.5	56.0	36
Z3SMB82	82	9.1	95	3000	0.25	0.5	62.2	33
Z3SMB91	91	8.2	115	3000	0.25	0.5	69.2	30
Z3SMB100	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)
Z3SMB110	110	6.8	225	4000	0.25	0.5	83.6	25
Z3SMB120	120	6.3	300	4500	0.25	0.5	91.2	22
Z3SMB130	130	5.8	375	5000	0.25	0.5	98.8	21
Z3SMB140	140	5.3	475	5000	0.25	0.5	106.4	19
Z3SMB150	150	5.0	550	6000	0.25	0.5	114.0	18
Z3SMB160	160	4.7	625	6500	0.25	0.5	121.6	17
Z3SMB170	170	4.4	650	7000	0.25	0.5	130.4	16
Z3SMB180	180	4.2	700	7000	0.25	0.5	136.8	15
Z3SMB190	190	4.0	800	8000	0.25	0.5	144.8	14
Z3SMB200	200	3.7	875	8000	0.25	0.5	152.0	13
Z3SMB220	220	3.4	1600	9000	0.25	1	167.0	12
Z3SMB240	240	3.1	1700	9000	0.25	1	182.0	11
Z3SMB270	270	2.8	1800	9000	0.25	1	205.0	10
Z3SMB300	300	2.5	1900	9000	0.25	1	228.0	9
Z3SMB330	330	2.3	2200	9000	0.25	1	251.0	8
Z3SMB360	360	2.1	2700	9000	0.25	1	274.0	8
Z3SMB400	400	1.9	3500	9000	0.25	1	304.0	7