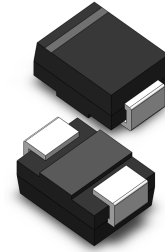


VOLTAGE RANGE: 3.3 - 200V
POWER: 3.0Watts

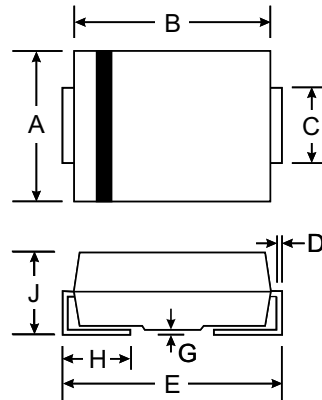
Features

- Complete Voltage Range 3.3 to 200 Volts
- High peak reverse power dissipation
- Flat handling surface for accurate placement



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 : 0.339 gram



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
Maximum Steady State Power Dissipation at T _L = 75°C, Measured at Zero Lead Length	P _D	3.0	W
Derate Above 75 °C		40	mW/°C
Thermal Resistance From Junction to Lead	R _{θJL}	25	°C/W
Maximum Steady State Power Dissipation at T _a = 25 °C Measured at Zero Lead Length	P _D	550	mW
Derate Above 25 °C		4.4	mW/°C
Thermal Resistance From Junction to Ambient	R _{θJA}	226	°C/W
Maximum Forward Voltage at I _F = 200 mA	V _F	1.5	Volts
Junction Temperature Range	T _J	- 65 to + 150	°C
Storage Temperature Range	T _{stg}	- 65 to + 150	°C



ELECTRICAL CHARACTERISTICS Rating at $T_L = 30^\circ\text{C}$ 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)
SMB5913	3.3	113.6	10	500	1.0	100	1.0	454
SMB5914	3.6	104.2	9.0	500	1.0	75	1.0	416
SMB5915	3.9	96.1	7.5	500	1.0	25	1.0	384
SMB5916	4.3	87.2	6.0	500	1.0	5.0	1.0	348
SMB5917	4.7	79.8	5.0	500	1.0	5.0	1.5	319
SMB5918	5.1	73.5	4.0	350	1.0	5.0	2.0	294
SMB5919	5.6	66.9	2.0	250	1.0	5.0	3.0	267
SMB5920	6.2	60.5	2.0	200	1.0	5.0	4.0	241
SMB5921	6.8	55.1	2.5	200	1.0	5.0	5.2	220
SMB5922	7.5	50.0	3.0	400	0.5	5.0	6.0	200
SMB5923	8.2	45.7	3.5	400	0.5	5.0	6.5	182
SMB5924	9.1	41.2	4.0	500	0.5	5.0	7.0	164
SMB5925	10	37.5	4.5	500	0.25	5.0	8.0	150
SMB5926	11	34.1	5.5	550	0.25	1.0	8.4	136
SMB5927	12	31.2	6.5	550	0.25	1.0	9.1	125
SMB5928	13	28.8	7.0	550	0.25	1.0	9.9	115
SMB5929	15	25.0	9.0	600	0.25	1.0	11.4	100
SMB5930	16	23.4	10	600	0.25	1.0	12.2	93
SMB5931	18	20.8	12	650	0.25	1.0	13.7	83
SMB5932	20	18.7	14	650	0.25	1.0	15.2	75
SMB5933	22	17.0	17.5	650	0.25	1.0	16.7	68
SMB5934	24	15.6	19	700	0.25	1.0	18.2	62
SMB5935	27	13.9	23	700	0.25	1.0	20.6	55
SMB5936	30	12.5	26	750	0.25	1.0	22.8	50
SMB5937	33	11.4	33	800	0.25	1.0	25.1	45
SMB5938	36	10.4	38	850	0.25	1.0	27.4	41
SMB5939	39	9.6	45	900	0.25	1.0	29.7	38
SMB5940	43	8.7	53	950	0.25	1.0	32.7	34
SMB5941	47	8.0	67	1000	0.25	1.0	35.8	31
SMB5942	51	7.3	70	1100	0.25	1.0	38.8	29
SMB5943	56	6.7	86	1300	0.25	1.0	42.6	26
SMB5944	62	6.0	100	1500	0.25	1.0	47.1	24
SMB5945	68	5.5	120	1700	0.25	1.0	51.7	22
SMB5946	75	5.0	140	2000	0.25	1.0	56.0	20
SMB5947	82	4.6	160	2500	0.25	1.0	62.2	18
SMB5948	91	4.1	200	3000	0.25	1.0	69.2	16
SMB5949	100	3.7	250	3100	0.25	1.0	76.0	15
SMB5950	110	3.4	300	4000	0.25	1.0	83.6	13
SMB5951	120	3.1	380	4500	0.25	1.0	91.2	12
SMB5952	130	2.9	450	5000	0.25	1.0	98.8	11
SMB5953	150	2.5	600	6000	0.25	1.0	114.0	10
SMB5954	160	2.3	700	6500	0.25	1.0	121.6	9.0
SMB5955	180	2.1	900	7000	0.25	1.0	136.8	8.0
SMB5956	200	1.9	1200	8000	0.25	1.0	152.0	7.0

Note :

(1) Suffix " B " indicates $\pm 5\%$ tolerance, suffix " A " indicates $\pm 10\%$ tolerance.



FIG. 1 - POWER TEMPERATURE DERATING CURVE

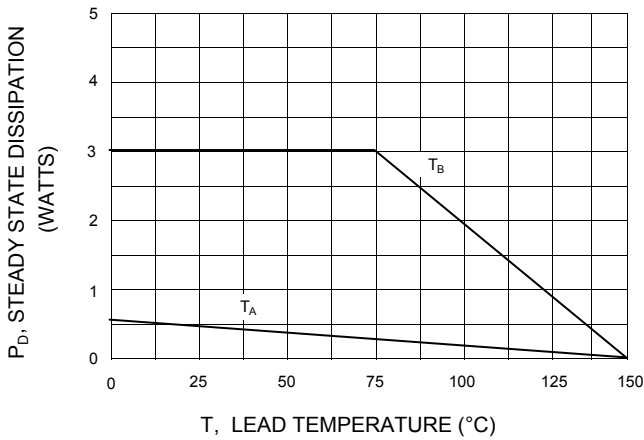


FIG. 3 - MAXIMUM SURGE POWER

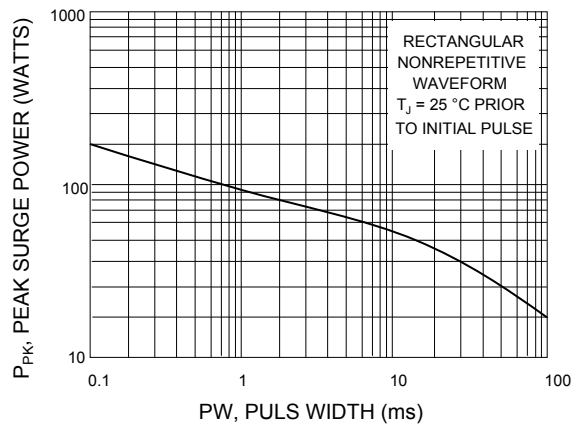


FIG. 5 - TEMPERATURE COEFFICIENT RANGES UNITS TO 12 VOLTS

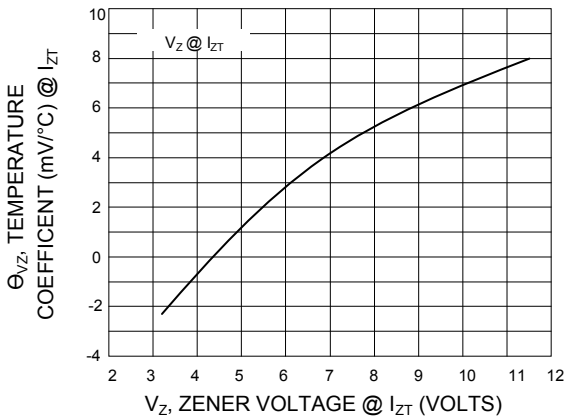


FIG. 6 - TEMPERATURE COEFFICIENT RANGES UNITS 10 TO 400 VOLTS

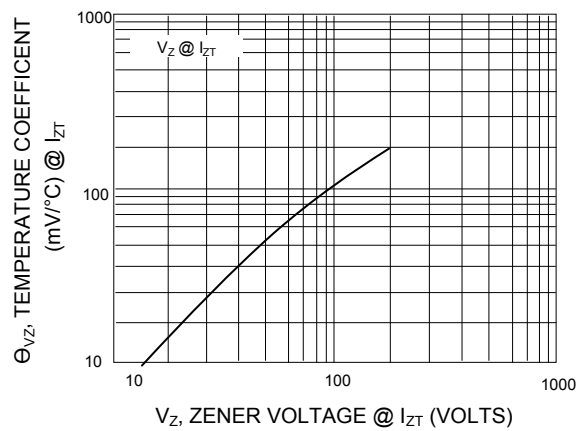


FIG. 7 - ZENER VOLTAGE VS. ZENER CURRENT V_Z = 3.3 thru 10 VOLTS

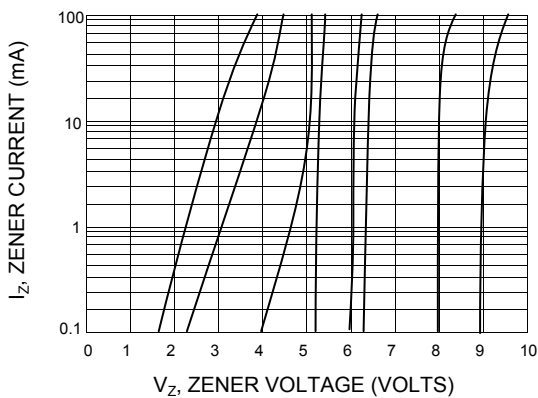


FIG. 8 - ZENER VOLTAGE VS. ZENER CURRENT V_Z = 12 thru 82 VOLTS

