

表面安装稳压二极管

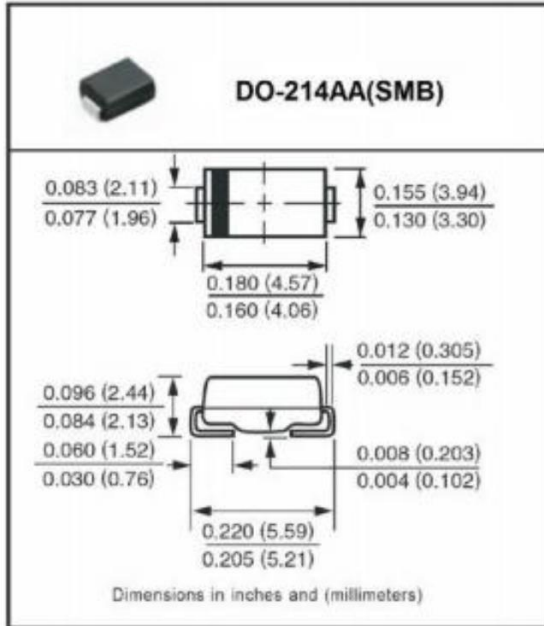
稳压电压 3.3—200V

功率 3.0W

Surface Mount Zener Rectifiers

Reverse Voltage 3.3 to 200 V

Power 3.0 W


Features

- Plastic package has Underwriters Laboratory Flammability Classification 94 V-0
- For surface mounted applications
- Low Zener impedance • Low regulation factor
- High temperature soldering guaranteed: 260 °C/ 10 seconds at terminal
- Lead and body according with RoHS standard
- Standard voltage tolerance is 10 %, Suffix A ± 5 %
- AEC-Q101 qualified

Mechanical Data

- Case: Molded plastic body
- Terminals: Solder plated
- Polarity: Color band denotes cathode end
- Mounting Position: Any

MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Maximum Steady State Power Dissipation at $T_L = 75^\circ\text{C}$, Measured at Zero Lead Length	P_D	3.0	W
Derate Above 75 OC		40	mW/°C
Thermal Resistance From Junction to Lead	$R_{\theta JL}$	25	°C/W
Maximum Steady State Power Dissipation at $T_a = 25^\circ\text{C}$ Measured at Zero Lead Length	P_D	550	mW
Derate Above 25 OC		4.4	mW/°C
Thermal Resistance From Junction to Ambient	$R_{\theta JA}$	226	°C/w
Maximum Forward Voltage at $I_F = 200\text{ mA}$	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 TL = 30 °C unless otherwise specified

TYPE	Marking Code	Nominal Zener Voltage		Maximum Zener Impedance			Maximum Reverse Leakage Current		Maximum DC Zener Current
		Vz@IzT	IzT	ZzT@IzT	ZzK@IzK	IzK	IR @ VR (μ A)	IZM (mA)	
		(V)	(mA)	(Ω)	(Ω)	(mA)			

SMBJ5913B	913B	3.3	113.6	10	500	1.0	100	1.0	454
SMBJ5914B	914B	3.6	104.2	9.0	500	1.0	75	1.0	416
SMBJ5915B	915B	3.9	96.1	7.5	500	1.0	25	1.0	384
SMBJ5916B	916B	4.3	87.2	6.0	500	1.0	5.0	1.0	348
SMBJ5917B	917B	4.7	79.8	5.0	500	1.0	5.0	1.5	319
SMBJ5918B	918B	5.1	73.5	4.0	400	1.0	5.0	2.0	294
SMBJ5919B	919B	5.6	66.9	2.0	300	1.0	5.0	3.0	267
SMBJ5920B	920B	6.2	60.5	2.0	200	1.0	5.0	4.0	241
SMBJ5921B	921B	6.8	55.1	2.5	200	1.0	5.0	5.2	220
SMBJ5922B	922B	7.5	50.0	3.0	400	0.5	5.0	6.0	200
SMBJ5923B	923B	8.2	45.7	3.5	400	0.5	5.0	6.5	182
SMBJ5924B	924B	9.1	41.2	4.0	500	0.5	5.0	7.0	164
SMBJ5925B	925B	10	37.5	4.5	500	0.25	5.0	8.0	150
SMBJ5926B	926B	11	34.1	5.5	550	0.25	1.0	8.4	136
SMBJ5927B	927B	12	31.2	6.5	550	0.25	1.0	9.1	125
SMBJ5928B	928B	13	28.8	7.0	550	0.25	1.0	9.9	115
SMBJ5929B	929B	15	25.0	9.0	600	0.25	1.0	11.4	100
SMBJ5930B	930B	16	23.4	10	600	0.25	1.0	12.2	93
SMBJ5931B	931B	18	20.8	12	650	0.25	1.0	13.7	83
SMBJ5932B	932B	20	18.7	14	650	0.25	1.0	15.2	75
SMBJ5933B	933B	22	17.0	17.5	650	0.25	1.0	16.7	68
SMBJ5934B	934B	24	15.6	19	700	0.25	1.0	18.2	62
SMBJ5935B	935B	27	13.9	23	700	0.25	1.0	20.6	55
SMBJ5936B	936B	30	12.5	28	750	0.25	1.0	22.8	50
SMBJ5937B	937B	33	11.4	33	800	0.25	1.0	25.1	45
SMBJ5938B	938B	36	10.4	38	850	0.25	1.0	27.4	41
SMBJ5939B	939B	39	9.6	45	900	0.25	1.0	29.7	38
SMBJ5940B	940B	43	8.7	53	950	0.25	1.0	32.7	34
SMBJ5941B	941B	47	8.0	67	1000	0.25	1.0	35.8	31
SMBJ5942B	942B	51	7.3	70	1100	0.25	1.0	38.8	29
SMBJ5943B	943B	56	6.7	86	1300	0.25	1.0	42.6	26
SMBJ5944B	944B	62	6.0	100	1500	0.25	1.0	47.1	24
SMBJ5945B	945B	68	5.5	120	1700	0.25	1.0	51.7	22
SMBJ5946B	946B	75	5.0	140	2000	0.25	1.0	56.0	20
SMBJ5947B	947B	82	4.6	160	2500	0.25	1.0	62.2	18
SMBJ5948B	948B	91	4.1	200	3000	0.25	1.0	69.2	16
SMBJ5949B	949B	100	3.7	250	3100	0.25	1.0	76.0	15
SMBJ5950B	950B	110	3.4	300	4000	0.25	1.0	83.6	13
SMBJ5951B	951B	120	3.1	380	4500	0.25	1.0	91.2	12
SMBJ5952B	952B	130	2.9	450	5000	0.25	1.0	98.8	11
SMBJ5953B	953B	150	2.5	600	6000	0.25	1.0	114.0	10
SMBJ5954B	954B	160	2.3	700	6500	0.25	1.0	121.6	9.0
SMBJ5955B	955B	180	2.1	900	7000	0.25	1.0	136.8	8.0
SMBJ5956B	956B	200	1.9	1200	8000	0.25	1.0	152.0	7.0

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

FIG. 1 - POWER TEMPERATURE DERATING CURVE

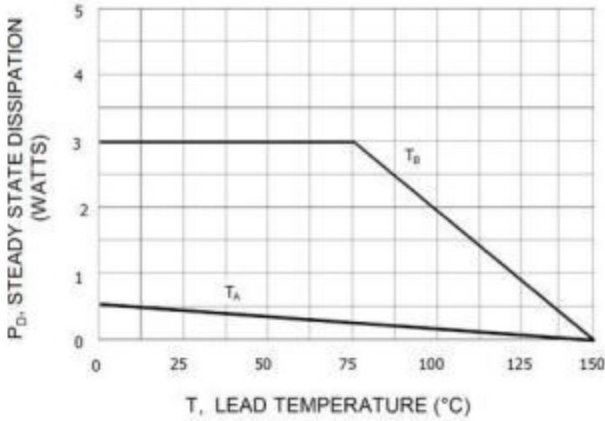


FIG. 3 - MAXIMUM SURGE POWER

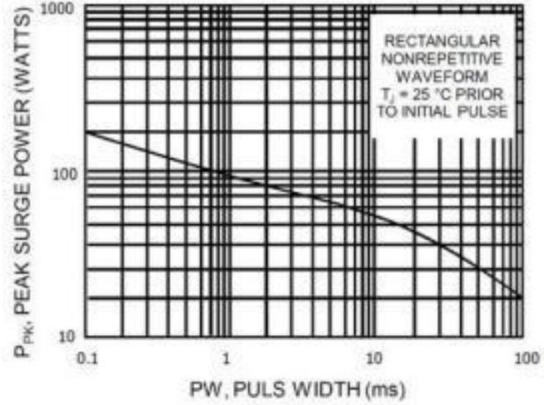


FIG. 5 - TEMPERATURE COEFFICIENT RANGES UNITS TO 12 VOLTS

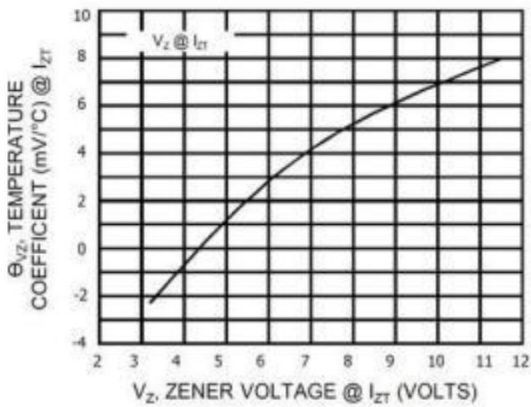


FIG. 6 - TEMPERATURE COEFFICIENT RANGES UNITS 10 TO 400 VOLTS

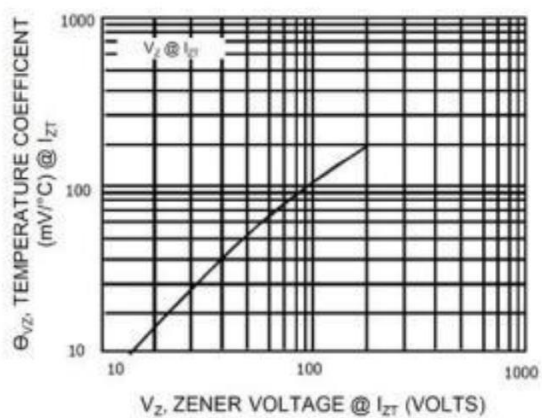


FIG. 7 - ZENER VOLTAGE VS. ZENER CURRENT $V_Z = 3.3$ thru 10 VOLTS

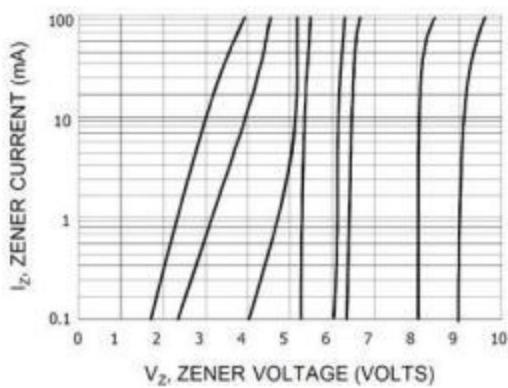
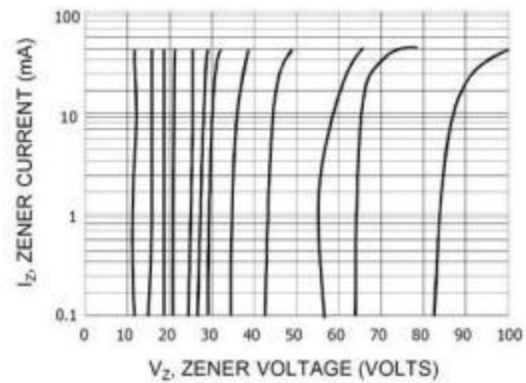
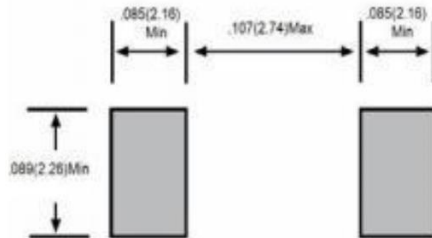


FIG. 8 - ZENER VOLTAGE VS. ZENER CURRENT $V_Z = 12$ thru 82 VOLTS





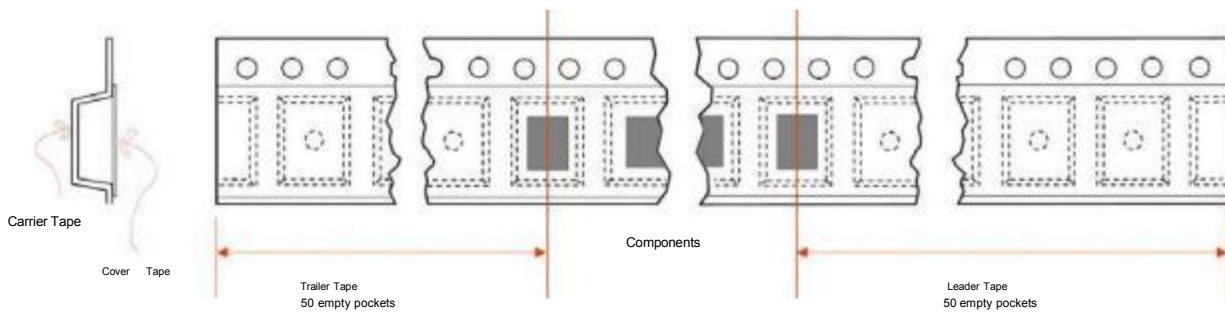
Mounting Pad Layout



Packing

Part number	Component Package	Quantity	Packaging Option
SMBJ5913-SMBJ5956	DO-214AA SMB	3000	Tape & Reel – 12mm/ 13" tape

DO-214 AASM) Tape Leader and Trailer Configuration



Tape and Reel Specification

