

■ Features

- 1,5W power dissipation.
- High peak reverse power dissipation.
- For surface mounted applications.
- Zener breakdown voltage range 6.2 to 200V
- Suffix "G" indicates Halogen-free part, ex. SMA5920BG.
- Lead-free parts meet environmental standards of MIL-STD-19500 /228

■ Mechanical data

- Epoxy:UL94-V0 rated flame retardant
- Case : Molded plastic, DO-214AC / SMA
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : Indicated by cathode band
- Weight : 0.002 ounce, 0.055 gram

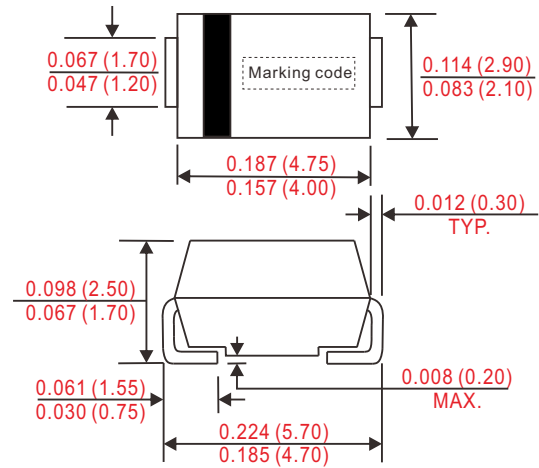
■ Maximum ratings and electrical characteristics

Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Conditions	Symbol	MIN.	TYP.	MAX.	UNIT
Power dissipation	$T_L = 75^\circ\text{C}$	P_D			1500	mW
Forward voltage	$I_F = 200\text{mA}$	V_F			1.5	V
Storage temperature		T_{STG}	-55		+150	°C
Operating Junction temperature		T_J	-55		+150	°C

■ Outline

SMA(DO-214AC)



Dimensions in inches and (millimeters)

■ Electrical characteristics

Part No.	Marking code	Zener voltage	Test current	Zener impedance			Maximum reverse current		Maximum Surge Current
		$V_Z @ I_{ZT}$	I_{ZT}	$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$	I_{ZK}	I_R	V_R	I_{RM}
		V	mA	OHMs	OHMs	mA	μA	Volts	mA
SMA5920B	920B	6.2	60.5	2.0	200	1.0	2.5	4.0	730
SMA5921B	921B	6.8	55.1	2.5	200	1.0	2.5	5.2	660
SMA5922B	922B	7.5	50.0	3.0	400	0.5	2.5	6.0	605
SMA5923B	923B	8.2	45.7	3.5	400	0.5	2.5	6.5	550
SMA5924B	924B	9.1	41.2	4.0	500	0.5	2.5	7.0	500
SMA5925B	925B	10	37.5	4.5	500	0.25	2.5	8.0	454
SMA5926B	926B	11	34.1	5.5	550	0.25	0.5	8.4	414
SMA5927B	927B	12	31.2	6.5	550	0.25	0.5	9.1	380
SMA5928B	928B	13	28.8	7.0	550	0.25	0.5	9.9	344
SMA5929B	929B	15	25.0	9.0	600	0.25	0.5	11.4	305
SMA5930B	930B	16	23.4	10	600	0.25	0.5	12.2	285
SMA5931B	931B	18	20.8	12	650	0.25	0.5	13.7	250
SMA5932B	932B	20	18.7	14	650	0.25	0.5	15.2	225
SMA5933B	933B	22	17.0	18	650	0.25	0.5	16.7	205
SMA5934B	934B	24	15.6	19	700	0.25	0.5	18.2	190
SMA5935B	935B	27	13.9	23	700	0.25	0.5	20.6	170
SMA5936B	936B	30	12.5	26	750	0.25	0.5	22.8	150
SMA5937B	937B	33	11.4	33	800	0.25	0.5	25.1	135
SMA5938B	938B	36	10.4	38	850	0.25	0.5	27.4	125
SMA5939B	939B	39	9.6	45	900	0.25	0.5	29.7	115
SMA5940B	940B	43	8.7	53	950	0.25	0.5	32.7	110
SMA5941B	941B	47	8.0	67	1000	0.25	0.5	35.8	95
SMA5942B	942B	51	7.3	70	1100	0.25	0.5	38.8	90
SMA5943B	943B	56	6.7	86	1300	0.25	0.5	42.6	80
SMA5944B	944B	62	6.0	100	1500	0.25	0.5	47.1	70
SMA5945B	945B	68	5.5	120	1700	0.25	0.5	51.7	65
SMA5946B	946B	75	5.0	140	2000	0.25	0.5	56.0	60
SMA5947B	947B	82	4.6	160	2500	0.25	0.5	62.2	55
SMA5948B	948B	91	4.1	200	3000	0.25	0.5	69.2	50
SMA5949B	949B	100	3.7	250	3100	0.25	0.5	76.0	45
SMA5950B	950B	110	3.4	300	4000	0.25	0.5	83.6	40
SMA5951B	951B	120	3.1	380	4500	0.25	0.5	91.2	37
SMA5952B	952B	130	2.9	450	5000	0.25	0.5	98.8	34
SMA5953B	953B	150	2.5	600	6000	0.25	0.5	114.0	30
SMA5954B	954B	160	2.3	700	6500	0.25	0.5	121.6	28
SMA5955B	955B	180	2.1	900	7000	0.25	0.5	136.8	25
SMA5956B	956B	200	1.9	1200	8000	0.25	0.5	152.0	22

Notes : 1. Tolerance and voltage regulation designation-the type number listed indicates a tolerance of ±5%.

Rating and characteristic curves

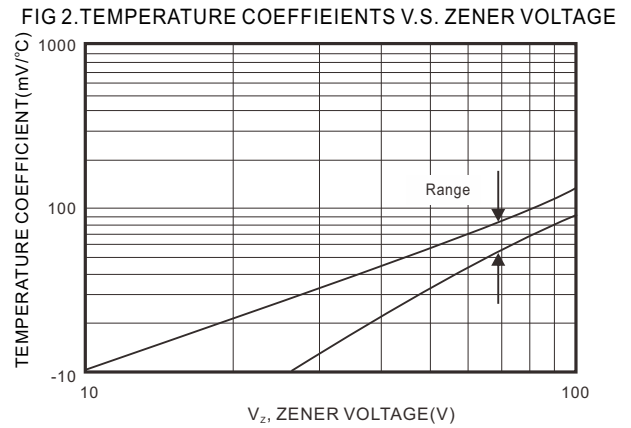
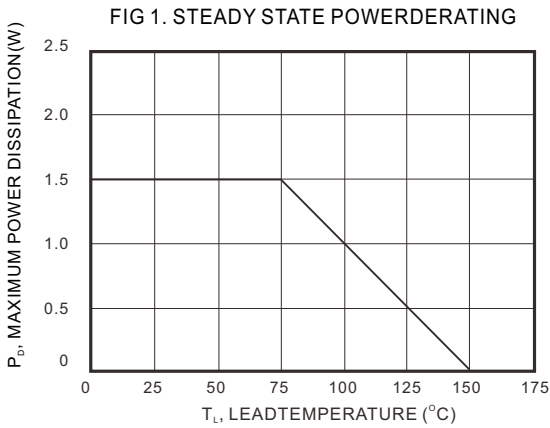


FIG 3. TYPICAL THERMAL RESISTANCE V.S. LEAD LENGTH

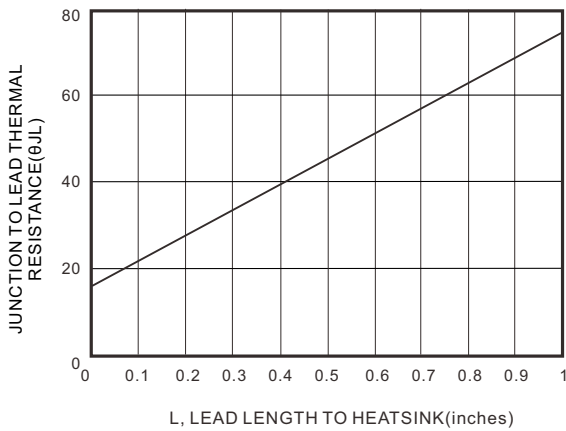


Fig 4. MAXIMUM SURGE POWER

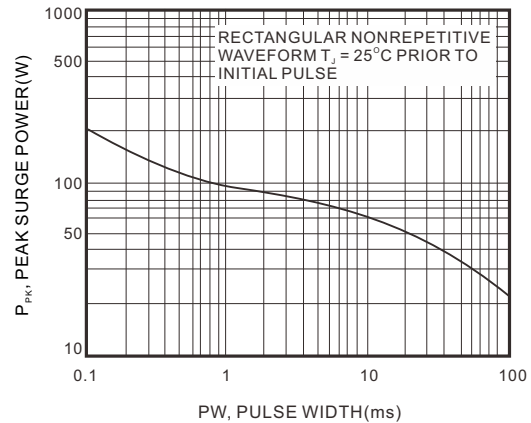
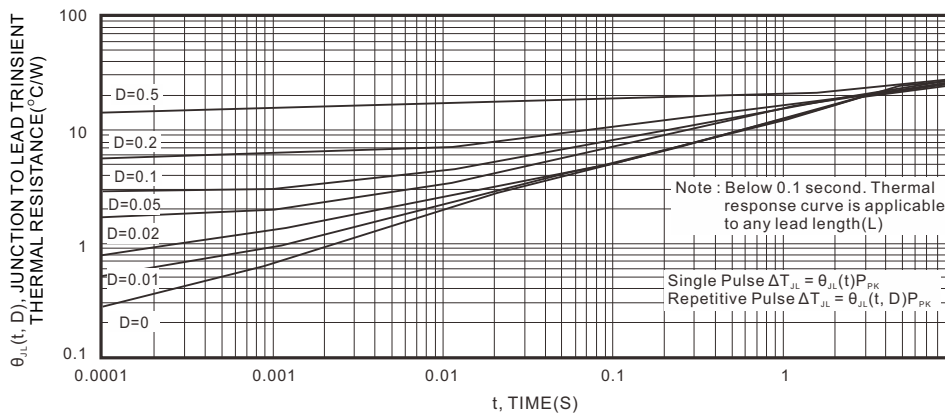
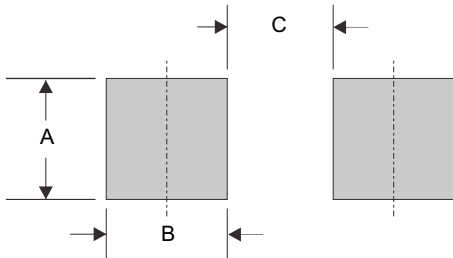


FIG 5. TYPICAL THERMAL RESPONSE L, LEAD LENGTH = 3/8 inch



■ SMA foot print



A	B	C
0.068 (1.70)	0.104 (2.60)	0.060 (1.50)

Dimensions in inches and (millimeters)

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