THE DATASHEET OF

SMAJ5924B-TP

Features

- V_Z – Tolerance: ±5%
- For Surface Mount Applications
- Halogen Free. “Green” Device (Note 1)
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant (Note2) ("P" Suffix Designates RoHS Compliant. See Ordering Information)

1.5 Watt Zener Diode 5.1 to 200 Volts

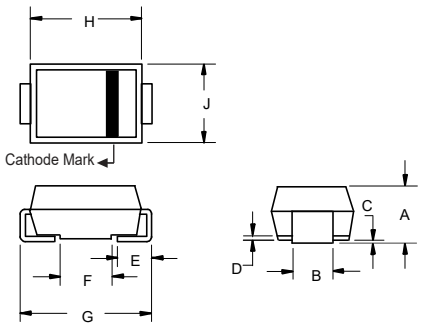
Maximum Ratings

- Operating Junction Temperature Range: -65°C to +150°C
- Storage Temperature Range: -65°C to +150°C
- Thermal Resistance : 50°C/W Junction to Lead(Note 3)
- Thermal Resistance : 83°C/W Junction to Ambient(Note 3)

Parameter	Symbol	Rating	Conditions
Power Dissipation	P_D	1.5W	$T_L \leq 75°C$
Maximum Forward Voltage	V_F	1.5V	I_F=200mA

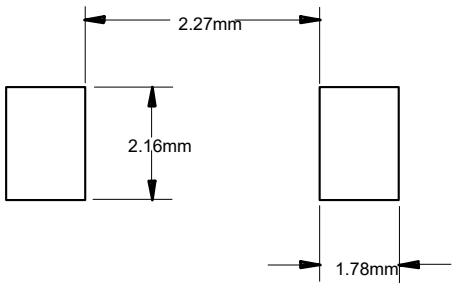
Note:
1. Halogen free "Green” products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
2. High Temperature Solder Exemption Applied, See EU Directive Annex 7a.
3. Mounted on PCB with recommended pad layout.

SMA (DO-214AC) LEAD FRAME



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.075	0.096	1.90	2.44	
B	0.050	0.064	1.27	1.63	
C	0.002	0.008	0.051	0.203	
D	---	0.020	---	0.51	
E	0.030	0.060	0.76	1.52	
F	0.065	0.091	1.65	2.32	
G	0.189	0.220	4.80	5.59	
H	0.157	0.187	4.00	4.75	
J	0.090	0.115	2.25	2.92	

SUGGESTED SOLDER PAD LAYOUT



Electrical Characteristics @ 25°C Unless Otherwise Specified

MCC Part Number	Zener Voltage (3)	Test Current	Maximum Dynamic Impedance	Knee Current	Knee Impedance	Maximum Reverse Current	Reverse Voltage	Marking Code
	V_Z	I_{ZT}	Z_{ZT} @ I_{ZT}	I_{ZK}	Z_{Zk}	I_R	V_R	
	V	mA	Ω	mA	Ω	μA	V	
SMAJ5918B	5.1	73.5	4	1	350	5.0	2	18B
SMAJ5919B	5.6	66.9	2	1	250	5.0	3	19B
SMAJ5920B	6.2	60.5	2	1	200	5.0	4	20B
SMAJ5921B	6.8	55.1	2.5	1	200	5.0	5.2	21B
SMAJ5922B	7.5	50	3	0.5	400	5.0	6	22B
SMAJ5923B	8.2	45.7	3.5	0.5	400	5.0	6.5	23B
SMAJ5924B	9.1	41.2	4	0.25	500	5.0	7	24B
SMAJ5925B	10	37.5	4.5	0.25	500	5.0	8	25B
SMAJ5926B	11	34.1	5.5	0.25	550	1.0	8.4	26B
SMAJ5927B	12	31.2	6.5	0.25	550	1.0	9.1	27B
SMAJ5928B	13	28.8	7	0.25	550	0.5	9.9	28B
SMAJ5929B	15	25	9	0.25	600	0.5	11.4	29B
SMAJ5930B	16	23.4	10	0.25	600	0.5	12.2	30B
SMAJ5931B	18	20.8	12	0.25	650	0.5	13.7	31B
SMAJ5932B	20	18.7	14	0.25	650	0.5	15.2	32B
SMAJ5933B	22	17	17.5	0.25	650	0.5	16.7	33B
SMAJ5934B	24	15.6	19	0.25	700	0.5	18.2	34B
SMAJ5935B	27	13.9	23	0.25	700	0.5	20.6	35B
SMAJ5936B	30	12.5	28	0.25	750	0.5	22.8	36B
SMAJ5937B	33	11.4	33	0.25	800	0.5	25.1	37B
SMAJ5938B	36	10.4	38	0.25	850	0.5	27.4	38B
SMAJ5939B	39	9.6	45	0.25	900	0.5	29.7	39B
SMAJ5940B	43	8.7	53	0.25	950	0.5	32.7	40B
SMAJ5941B	47	8	67	0.25	1000	0.5	35.8	41B
SMAJ5942B	51	7.3	70	0.25	1100	0.5	38.8	42B
SMAJ5943B	56	6.7	86	0.25	1300	0.5	42.6	43B
SMAJ5944B	62	6	100	0.25	1500	0.5	47.1	44B
SMAJ5945B	68	5.5	120	0.25	1700	0.5	51.7	45B
SMAJ5946B	75	5	140	0.25	2000	0.5	56	46B
SMAJ5947B	82	4.6	160	0.25	2500	0.5	62.2	47B
SMAJ5948B	91	4.1	200	0.25	3000	0.5	69.2	48B
SMAJ5949B	100	3.7	250	0.25	3100	0.5	76	49B
SMAJ5950B	110	3.4	300	0.25	4000	0.5	83.6	50B
SMAJ5951B	120	3.1	380	0.25	4500	0.5	91.2	51B
SMAJ5952B	130	2.9	450	0.25	5000	0.5	98.8	52B
SMAJ5953B	150	2.5	600	0.25	6000	0.5	114	53B
SMAJ5954B	160	2.3	700	0.25	6500	0.5	121.6	54B
SMAJ5955B	180	2.1	900	0.25	7000	0.5	136.8	55B
SMAJ5956B	200	1.9	1200	0.25	8000	0.5	152	56B

Note:4. Based on DC-measurement at Thermal Equilibrium While Maintaining The Lead Temperature(T_L) at 30°C , 9.5mm(3/8) from The Diode Body

Curve Characteristics

Fig. 1 - Power Derating Curve

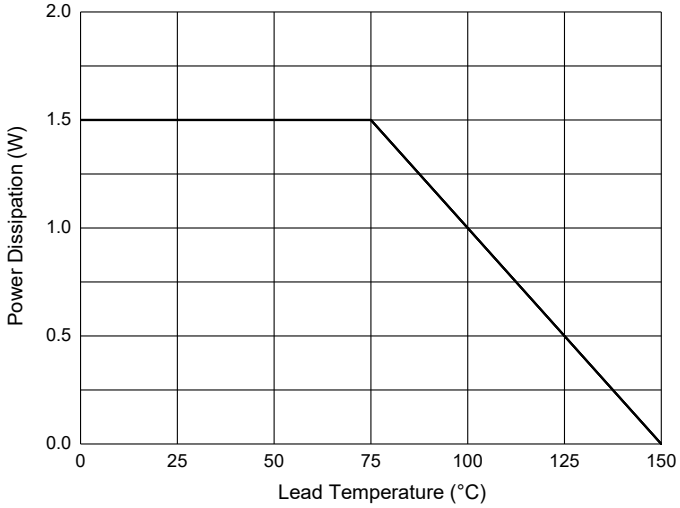


Fig. 2 - Typical Zener Breakdown Characteristics

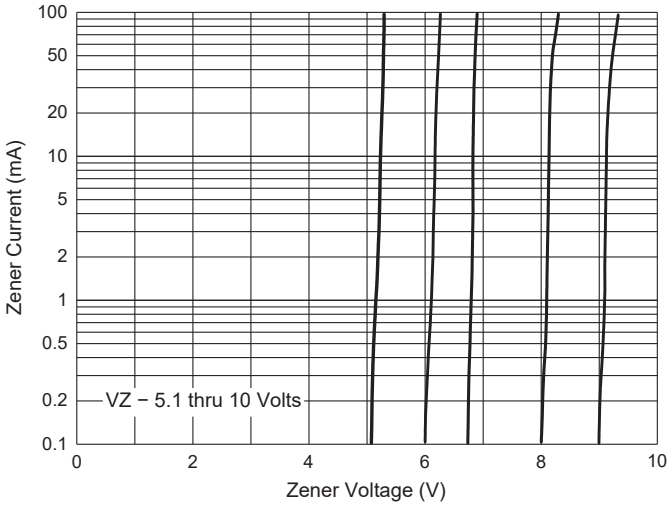
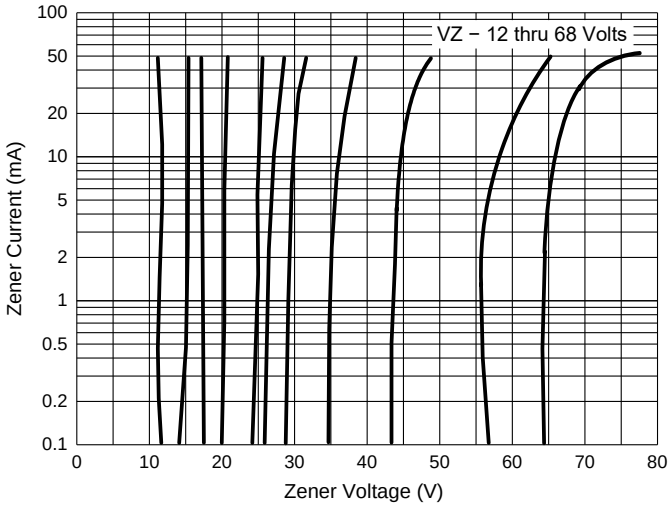


Fig. 3 - Typical Zener Breakdown Characteristics



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel:7.5Kpcs/Reel

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