SMAJ4728A thru SMAJ4764A

Surface Mount Silicon Zener Diodes

Reverse Voltage 3.3 to 100 Volts
Power Dissipation - 1.0 Watts

FEATURES

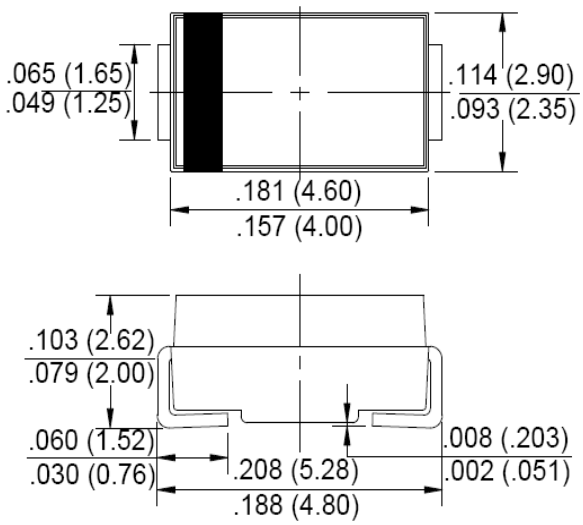
- For surface mounted application(flat handing surface for Accurate placement)
- High Surge Current Rating
- Higher Voltages Auailable
- Available on Tape and Reel

MECHANICAL DATA

- Case : JEDEC DO-214AC molded plastic body over passivated chip
- Terminals solderable per MIL-STD-750, Method 2026
- Polarity is indicated by cathode band.
- Maximum temperature for soldering:260℃ for 10 seconds.
- For surface mount application with flame retardent epoxy Meeting UL 94V-0

Note: Products with logo HY or hy are made by HY Electronic (Cayman) Limited.

SMA



Dimensions in inches and(millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

CHARACTERISTICS	SYMBOL	VALUE	UNIT
Peak Surge Current	Is	See Table 1	
Maximum Forward Voltage(Note:1)	V_F	1.2	VOLTS
Steady State Power Dissipation at (Note:2,3)	$P_{(AV)}$	1.0	WATTS
Operating Temperature Range	T_J	-55 to + 150	℃
Storage Temperature Range	T_{STG}	-55 to + 150	℃

NOTES:1. Forward Current @ 200 mA.

2. Mounted on 4.0mm^2 copper pads to each terminal,

3.Lead temperature at 100℃ or less. Derate linearly above 100℃ to zero power at 150℃.

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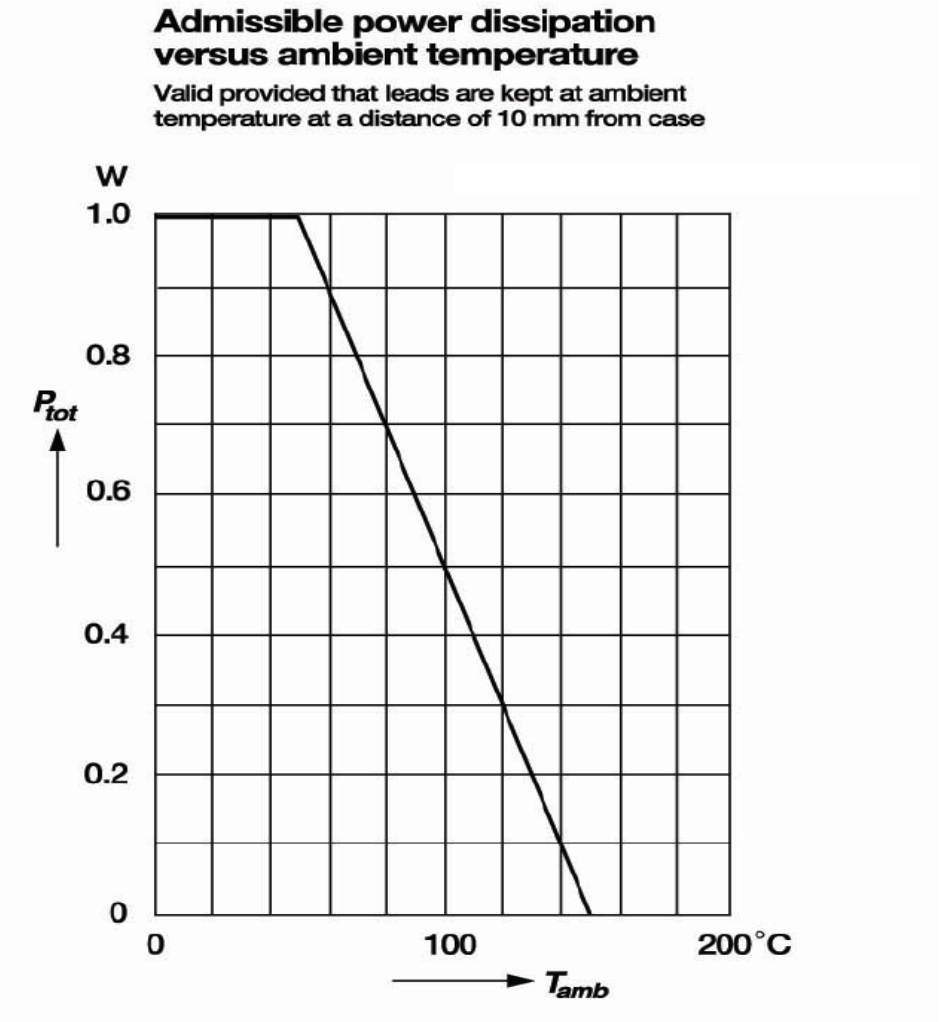
PART NUMBER	ZENER VOLTAGE Vz	TEST CURRENT Izt	MAXIMUM DYNAMIC IMPEDANCE Zzt@Izt	MAXIMUM REVERSE CURRENT Ir@Vr	TEST VOLTAGE Vr	MAXIMUM REGULATOR CURRENT Izm Ta=50℃	MAXIMUM KNEE IMPEDANCE Zzk@Izk	TEST CURRENT Izk	MAXIMUM SURGE CURRENT Is
	VOLTS	mA	OHMS	μA	VOLTS	mA	OHMS	mA	mA
SMAJ4728A	3.3	76	10	100	1	276	400	1	1380
SMAJ4729A	3.6	69	10	100	1	252	400	1	1260
SMAJ4730A	3.9	64	9	50	1	234	400	1	1190
SMAJ4731A	4.3	58	9	10	1	217	400	1	1070
SMAJ4732A	4.7	53	8	10	1	193	500	1	970
SMAJ4733A	5.1	49	7	10	1	178	550	1	890
SMAJ4734A	5.6	45	5	10	2	162	600	1	810
SMAJ4735A	6.2	41	2	10	3	146	700	1	730
SMAJ4736A	6.8	37	3.5	10	4	133	700	1	660
SMAJ4737A	7.5	34	4.0	10	5	121	700	0.5	605
SMAJ4738A	8.2	31	4.5	10	6	110	700	0.5	550
SMAJ4739A	9.1	28	5.0	10	7	100	700	0.5	500
SMAJ4740A	10	25	7	10	7.6	91	700	0.25	454
SMAJ4741A	11	23	8	5	8.4	83	700	0.25	414
SMAJ4742A	12	21	9	5	9.1	76	700	0.25	380
SMAJ4743A	13	19	10	5	9.9	69	700	0.25	344
SMAJ4744A	15	17	14	5	11.4	61	700	0.25	304
SMAJ4745A	16	15.5	16	5	12.2	57	700	0.25	285
SMAJ4746A	18	14	20	5	13.7	50	750	0.25	250
SMAJ4747A	20	12.5	22	5	15.2	45	750	0.25	225
SMAJ4748A	22	11.5	23	5	16.7	41	750	0.25	205
SMAJ4749A	24	10.5	25	5	18.2	38	750	0.25	190
SMAJ4750A	27	9.5	35	5	20.6	34	750	0.25	170
SMAJ4751A	30	8.5	40	5	22.8	30	1000	0.25	150
SMAJ4752A	33	7.5	45	5	25.1	27	1000	0.25	135
SMAJ4753A	36	7.0	50	5	27.4	25	1000	0.25	125
SMAJ4754A	39	6.5	60	5	29.4	23	1000	0.25	115
SMAJ4755A	43	6.0	70	5	32.7	22	1500	0.25	110
SMAJ4756A	47	5.5	80	5	35.8	19	1500	0.25	95
SMAJ4757A	51	5.0	95	5	38.8	18	1500	0.25	90
SMAJ4758A	56	4.5	110	5	42.6	16	2000	0.25	80
SMAJ4759A	62	4.0	125	5	47.1	14	2000	0.25	70
SMAJ4760A	68	3.7	150	5	51.7	13	2000	0.25	65
SMAJ4761A	75	3.3	175	5	56.0	12	2000	0.25	60
SMAJ4762A	82	3.0	200	5	62.2	11	3000	0.25	55
SMAJ4763A	91	2.8	250	5	69.2	10	3000	0.25	50
SMAJ4764A	100	2.5	350	5	76.0	9	3000	0.25	45

Notes 1. The zener impedance is derived from the 60Hz AC voltage, which results when an AC current having an rms value equal to 10% of the DC zener current (Izt or Izk) is superimposed on Izk. Zener impedance is measured at two points to insure a sharp knee on the breakdown curve and eliminate unstable units.

2. The reverse surge current is measured at 25℃ ambient using a 1/2 square wave or equivalent sine wave pulse 1/20 second duration superimposed on Izt

3. Voltage measurements to be performed 90 seconds after application of DC current.

4.Standard voltage tolerance is 10 %, Suffix A ± 5 %.



The curve above is for reference only.

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