

# SMA4728A THRU SMA4764A

## SURFACE MOUNT ZENER DIODES

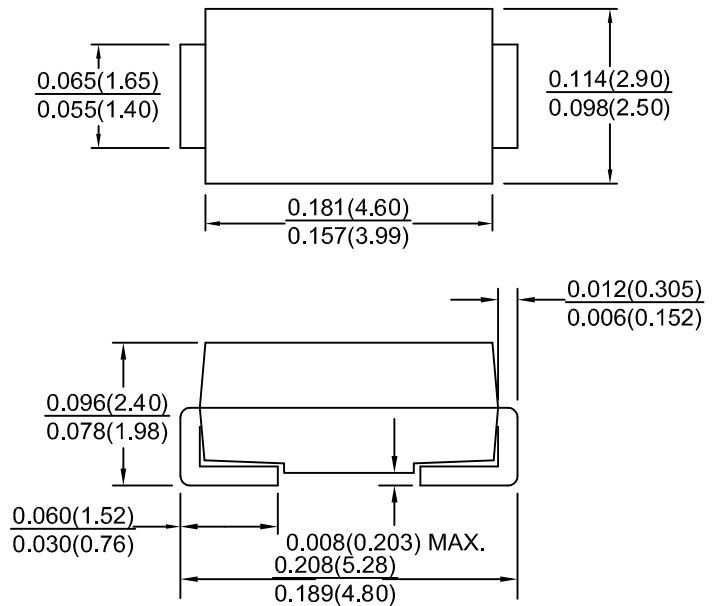
### SMA/DO-214AC

#### FEATURES:

- Standard Zener voltage tolerance is  $\pm 5\%$  with "A" suffix for  $\pm 5\%$
- For surface mounted applications
- 1.0W power dissipation
- Ideally suited for automated assembly processes

#### MECHANICAL DATA

Case: Molded plastic SMA/DO-214AC  
 EPOXY: UL 94v-0 rate flame retardant  
 Terminal: Solderable per MIL-STD-750 method 2026  
 Polarity: Cathode band  
 Mounting Position: Any  
 Weight: 0.064 grams



Dimensions in inches and (millimeters)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

Characteristic	Symbol	Value	Units
Power Dissipation at Tamb=25 °C (Note1)	Ptot	1.0	W
Half sine-wave superimposed on rated load (Note 2)	IFSM	10	A
Operating junction and storage temperature range	TJ, Tstg	-55 to +150	°C

Note:  
 (1) Mounted on 0.5mm x 0.5mm (0.013mm thick) land areas  
 (2) Measured on 8.3ms single half-sine wave or equivalent square, duty cycle = 4 pulses per maximum

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FIGURE.1-MAXIMUM POWER DERATING CURVE

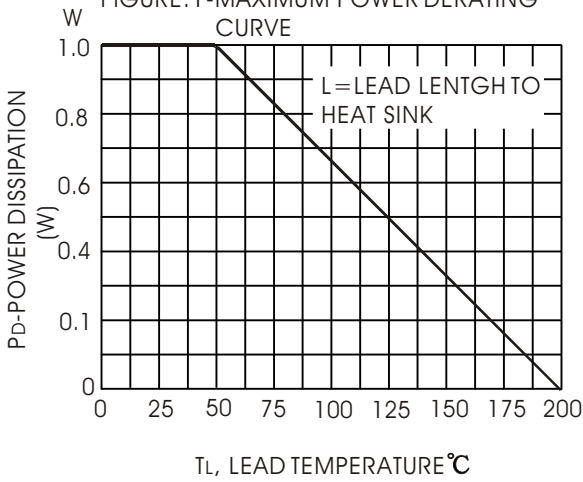


FIGURE.2-TYPICAL THERMAL RESISTANCE VERSUS LEAD LENGTH

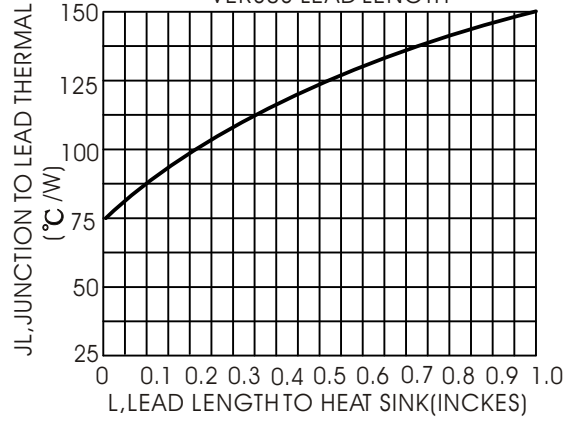


FIGURE.3A-TEMPERATURE COEFFICIENTS

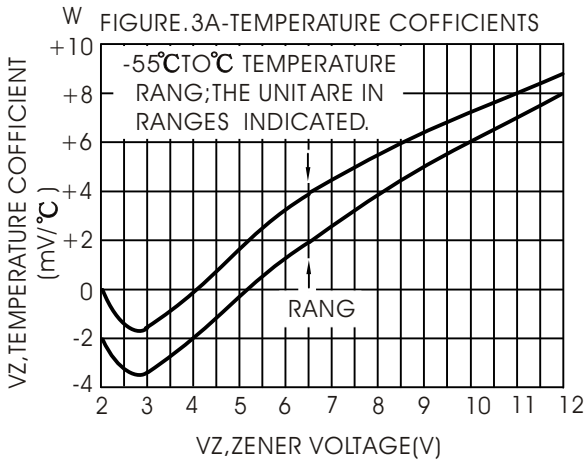


FIGURE.3B-TEMPERATURE COEFFICIENTS

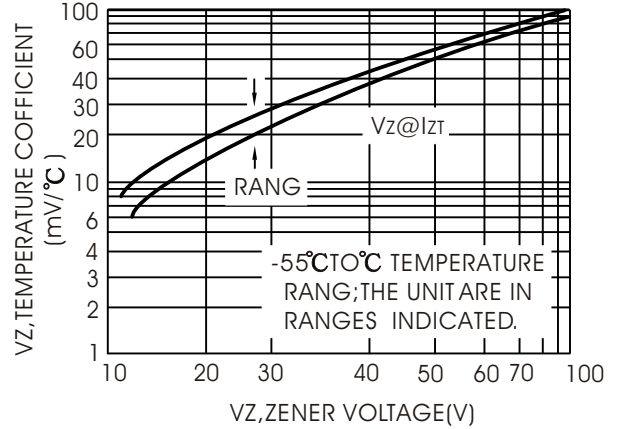


FIGURE.4-EFFECT OF ZENER CURRENT

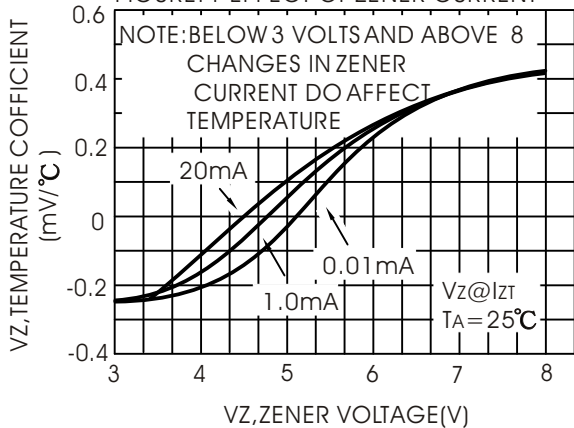
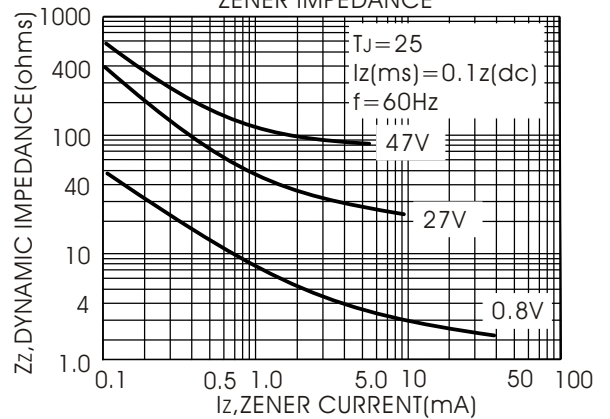


FIGURE.5-EFFECT OF ZENER CURRENT ON ZENER IMPEDANCE



**SURFACE MOUNT ZENER DIODES SMA4728A THRU SMA4764A**

Device Type	Nominal Zener Voltage Vz at IzT	Test Current IzT	Maximum Zener Impedance			Maximum Reverse Leakage Current		Marking
			ZzT at IzT	ZzK at IzK	IzK	IR	Test-Voltage	
	Volts	<b>mA</b>	$\Omega$	$\Omega$	<b>mA</b>	$\mu A$	Volts	
SMA4728A	3.3	76	10	400	1	100	1	4728A
SMA4729A	3.6	69	10	400	1	100	1	4729A
SMA4730A	3.9	64	9.0	400	1	50	1	4730A
SMA4731A	4.3	58	9.0	400	1	10	1	4731A
SMA4732A	4.7	53	8.0	500	1	10	1	4732A
SMA4733A	5.1	49	7.0	550	1	10	1	4733A
SMA4734A	5.6	45	5.0	600	1	10	2	4734A
SMA4735A	6.2	41	2.0	700	1	10	3	4735A
SMA4736A	6.8	37	3.5	700	1	10	4	4736A
SMA4737A	7.5	34	4.0	700	0.5	10	5	4737A
SMA4738A	8.2	31	4.5	700	0.5	10	6	4738A
SMA4739A	9.1	28	5.0	700	0.5	10	7	4739A
SMA4740A	10	25	7.0	700	0.25	10	7.6	4740A
SMA4741A	11	23	8.0	700	0.25	5	8.4	4741A
SMA4742A	12	21	9.0	700	0.25	5	9.1	4742A
SMA4743A	13	19	10	700	0.25	5	9.9	4743A
SMA4744A	15	17	14	700	0.25	5	11.4	4744A
SMA4745A	16	15.5	16	700	0.25	5	12.2	4745A
SMA4746A	18	14	20	750	0.25	5	13.7	4746A
SMA4747A	20	12.5	22	750	0.25	5	15.2	4747A
SMA4748A	22	11.5	23	750	0.25	5	16.7	4748A
SMA4749A	24	10.5	25	750	0.25	5	18.2	4749A
SMA4850A	27	9.5	35	750	0.25	5	20.6	4750A
SMA4751A	30	8.5	40	1000	0.25	5	22.8	4751A
SMA4752A	33	7.5	45	1000	0.25	5	25.1	4752A
SMA4753A	36	7.0	50	1000	0.25	5	27.4	4753A
SMA4754A	39	6.5	60	1000	0.25	5	29.7	4754A
SMA4755A	43	6.0	70	1500	0.25	5	32.7	4755A
SMA4756A	47	5.5	80	1500	0.25	5	35.8	4756A
SMA4757A	51	5.0	95	1500	0.25	5	38.8	4757A
SMA4758A	56	4.5	110	2000	0.25	5	42.6	4758A
SMA4759A	62	4.0	125	2000	0.25	5	47.1	4759A
SMA4760A	68	3.7	150	2000	0.25	5	51.7	4760A
SMA4761A	75	3.3	175	2000	0.25	5	56.0	4761A
SMA4762A	82	3.0	200	3000	0.25	5	62.2	4762A
SMA4763A	91	2.8	250	3000	0.25	5	69.2	4763A
SMA4764A	100	2.5	350	3000	0.25	5	76.0	4764A

Suffix "A" for 5%,