



**DC COMPONENTS CO., LTD.**  
RECTIFIER SPECIALISTS

**SMA4728A  
THRU  
SZ1330A**

**TECHNICAL SPECIFICATIONS OF SURFACE MOUNT ZENER DIODES**

**VOLTAGE RANGE - 3.3 to 330 Volts**

**POWER - 1.0 Watt**

**FEATURES**

- \* Voltage Range: 3.3V to 330V
- \* Low zener impedance
- \* Low regulation factor
- \* High reliability
- \* Glass passivated junction

**MECHANICAL DATA**

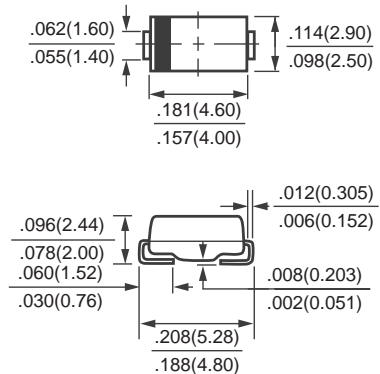
- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- \* Polarity: As marked
- \* Mounting position: Any
- \* Weight: 0.064 gram

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

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



**SMA ( DO-214AC )**

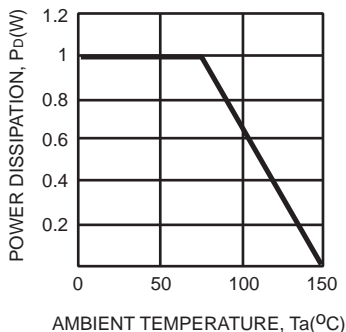


Dimensions in inches and (millimeters)

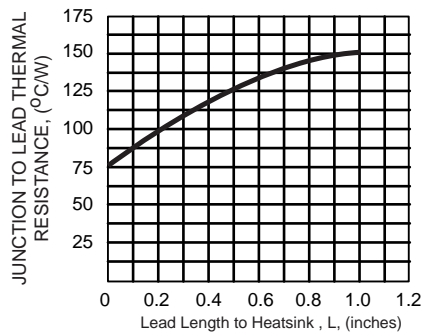
	SYMBOL	VALUE	UNITS
Maximum Power Dissipation @TL=75°C (Note 1)	Ptot	1.0	W
Maximum forward voltage at IF=200mA	VF	1.2	Volts
Maximum Thermal Resistance Junction to Ambient Air	RθJA	170	°C/W
Junction Temperature Range	TJ	-55 to +150	°C
Storage Temperature Range	TSTG	-55 to +150	°C

NOTE: Suffix "A" indicates Zener Voltage Tolerance ± 5%

**Fig. 1  
POWER TEMPERATURE  
DERATING CURVE**



**Fig. 2  
TYPICAL THERMAL RESISTANCE  
VERSUS LEAD LENGTH**



# RATING AND CHARACTERISTIC CURVES (SMA4728A THRU SZ1330A)

TYPE	Nominal Zener Voltage	Zener Test Current	Maximum Zener Impedance		IZK	Maximum Reverse Leakage Current	
	VZ@IZT	IZT	ZZT@IZT	ZZT@IZK		IR	@VR
	Volts	mA	Ohms	Ohms		μA	Volts
SMA4728A	3.3	76	10	400	1.0	100	1.0
SMA4729A	3.6	69	10	400	1.0	100	1.0
SMA4730A	3.9	64	9.0	400	1.0	50	1.0
SMA4731A	4.3	58	9.0	400	1.0	10	1.0
SMA4732A	4.7	53	8.0	500	1.0	10	1.0
SMA4733A	5.1	49	7.0	550	1.0	10	1.0
SMA4734A	5.6	45	5.0	600	1.0	10	2.0
SMA4735A	6.2	41	2.0	700	1.0	10	3.0
SMA4736A	6.8	37	3.5	700	1.0	5.0	4.0
SMA4737A	7.5	34	4.0	700	0.5	5.0	5.0
SMA4738A	8.2	31	4.5	700	0.5	5.0	6.0
SMA4739A	9.1	28	5.0	700	0.5	0.5	7.0
SMA4740A	10	25	7.0	700	0.25	0.5	7.6
SMA4741A	11	23	8.0	700	0.25	0.1	8.4
SMA4742A	12	21	9.0	700	0.25	0.1	9.1
SMA4743A	13	19	10	700	0.25	0.1	9.9
SMA4744A	15	17	14	700	0.25	0.1	11.4
SMA4745A	16	15.5	16	700	0.25	0.1	12.2
SMA4746A	18	14	20	750	0.25	0.1	13.7
SMA4747A	20	12.5	22	750	0.25	0.1	15.2
SMA4748A	22	11.5	23	750	0.25	0.1	16.7
SMA4749A	24	10.5	25	750	0.25	0.1	18.2
SMA4750A	27	9.5	35	750	0.25	0.1	20.6
SMA4751A	30	8.5	40	1000	0.25	0.1	22.8
SMA4752A	33	7.5	45	1000	0.25	0.1	25.1
SMA4753A	36	7.0	50	1000	0.25	0.1	27.4
SMA4754A	39	6.5	60	1000	0.25	0.1	29.7
SMA4755A	43	6.0	70	1500	0.25	0.1	32.7
SMA4756A	47	5.5	80	1500	0.25	0.1	35.8
SMA4757A	51	5.0	95	1500	0.25	0.1	38.8
SMA4758A	56	4.5	110	2000	0.25	0.1	42.6
SMA4759A	62	4.0	125	2000	0.25	0.1	47.1
SMA4760A	68	3.7	150	2000	0.25	0.1	51.7
SMA4761A	75	3.3	175	2000	0.25	0.1	56.0
SMA4762A	82	3.0	200	2000	0.25	0.1	62.2
SMA4763A	91	2.8	250	2000	0.25	0.1	69.2
SMA4764A	100	2.5	350	2000	0.25	0.1	76.0
SZ1110A	110	2.3	450	4000	0.25	0.1	83.6
SZ1120A	120	2.0	550	4500	0.25	0.1	91.2
SZ1130A	130	1.9	700	5000	0.25	0.1	98.8
SZ1150A	150	1.7	1000	6000	0.25	0.1	114.0
SZ1160A	160	1.6	1100	6500	0.25	0.1	121.6
SZ1180A	180	1.4	1200	7000	0.25	0.1	136.8
SZ1200A	200	1.2	1900	9990	0.25	0.1	152.0
SZ1220A	220	1.0	1600	8000	0.25	0.1	167.2
SZ1240A	240	0.9	1800	8500	0.25	0.1	182.4
SZ1250A	250	0.9	2000	9000	0.25	0.1	190.4
SZ1270A	270	0.8	2100	9000	0.25	0.1	205.0
SZ1300A	300	0.8	2300	9500	0.25	0.1	228.0
SZ1330A	330	0.7	2500	9500	0.25	0.1	250.2

NOTE: Standard Zener Voltage Tolerance  $\pm 5\%$

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