

RoHS Compliant Product

A suffix of "-C" specifies halogen & lead-free

**SMA**

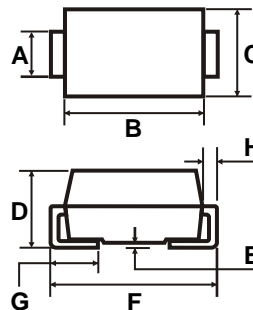
● **FEATURES**

- . For surface mounted applications
- . 1.0 W power dissipation
- . Low reverse current
- . Ideally suited for automated assembly processes
- . Epitaxial construction



● **MECHANICAL DATA**

- . Case: Molded plastic
- . Epoxy: UL 94V-0 rate flame retardant
- . Metallurgically bonded construction
- . Polarity: Color band denotes cathode end
- . Mounting position: Any
- . Weight: 0.064 grams



	Dimensions in Millimeters		Dimensions in Inches	
<b>A</b>	1.25	1.65	0.049	0.065
<b>B</b>	3.99	4.60	0.157	0.181
<b>C</b>	2.50	2.90	0.098	0.114
<b>D</b>	1.98	2.44	0.078	0.096
<b>E</b>	0.051	0.203	0.002	0.008
<b>F</b>	4.78	5.28	0.188	0.208
<b>G</b>	0.76	1.52	0.030	0.060
<b>H</b>	0.152	0.305	0.006	0.012

● **MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Rating 25 ambient temperature unless otherwise specified.

Electrical Characteristics	Symbol	Value	Unit
Power Dissipation (Note 1)	P <sub>D</sub>	1.0	W
Half sine-wave superimposed on rated load JEDEC method (Note 2)	I <sub>FSM</sub>	10	A
Operating junction and Storage Temperature	T <sub>J</sub> , T <sub>STG</sub>	-55 to +155	°C

Note: (1) Mounted on 5.0mm<sup>2</sup>(.013mm thick) land areas.

(2) Measurd on 8.3ms, single half-sine wave or equivalent square wave, duty cycle = 4 pulses per minute maximum. □



**Elektronische Bauelemente**

# SMA4735 THRU SMA4764

**VOLTAGE 6.2V ~ 100V**

**1.0 Watts Surface Mount Zener Diode**

## Electrical Characteristic (Ta=25°C)

Part No.	Vz ( V )	IzT ( mA )	ZzT (Ohm)	ZzK (Ohm)	IzK ( mA )	IR(uA) Max.		Surge Current ( mA )
							VR(V)	
SMA4735	6.2	41	2.0	700	1.0	50.0	3.0	730
SMA4736	6.8	37	3.5	700	1.0	10.0	4.0	660
SMA4737	7.5	34	4.0	700	0.5	10.0	5.0	605
SMA4738	8.2	31	4.5	700	0.5	10.0	6.0	550
SMA4739	9.1	28	5.0	700	0.5	10.0	7.0	500
SMA4740	10	25	7.0	700	0.25	10.0	7.6	454
SMA4741	11	23	8.0	700	0.25	5.0	8.4	414
SMA4742	12	21	9.0	700	0.25	5.0	9.1	380
SMA4743	13	19	10	700	0.25	5.0	9.9	344
SMA4744	15	17	14	700	0.25	5.0	11.4	304
SMA4745	16	15.5	16	700	0.25	5.0	12.2	285
SMA4746	18	14	20	750	0.25	5.0	13.7	250
SMA4747	20	12.5	22	750	0.25	5.0	15.2	225
SMA4748	22	11.5	23	750	0.25	5.0	16.7	205
SMA4749	24	10.5	25	750	0.25	5.0	18.2	190
SMA4750	27	9.5	35	750	0.25	5.0	20.6	170
SMA4751	30	8.5	40	1000	0.25	5.0	22.8	150
SMA4752	33	7.5	45	1000	0.25	5.0	25.1	135
SMA4753	36	7	50	1000	0.25	5.0	27.4	125
SMA4754	39	6.5	60	1000	0.25	5.0	29.7	115
SMA4755	43	6	70	1500	0.25	5.0	32.7	110
SMA4756	47	5.5	80	1500	0.25	5.0	35.8	95
SMA4757	51	5	95	1500	0.25	5.0	38.8	90
SMA4758	56	4.5	110	2000	0.25	5.0	42.6	80
SMA4759	62	4	125	2000	0.25	5.0	47.1	70
SMA4760	68	3.7	150	2000	0.25	5.0	51.7	65
SMA4761	75	3.3	175	2000	0.25	5.0	56.0	60
SMA4762	82	3	200	3000	0.25	5.0	62.2	55
SMA4763	91	2.8	250	3000	0.25	5.0	69.2	50
SMA4764	100	2.5	350	3000	0.25	5.0	76.0	45

Tolerance 5%

FIG 1. POWER TEMPERATURE DERATING CURVE

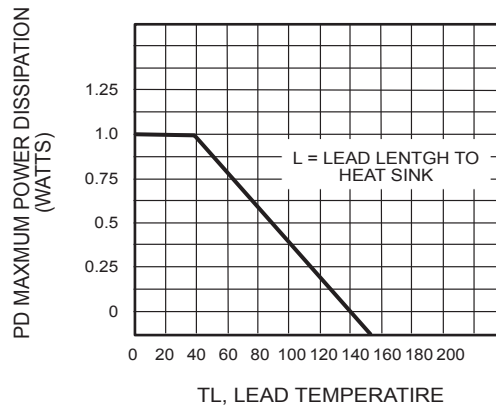


FIG 2. TEMPERATURE COEFFICIENTS  
(-55°C TO +150°C TEMPERATURE RANGE; 90% OF THE UNITS ARE IN RANGES INDICATED.)

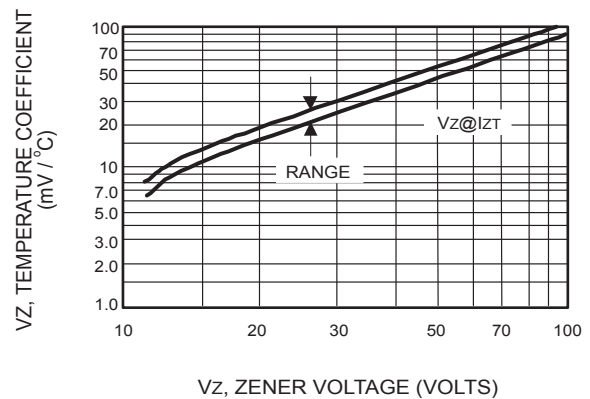
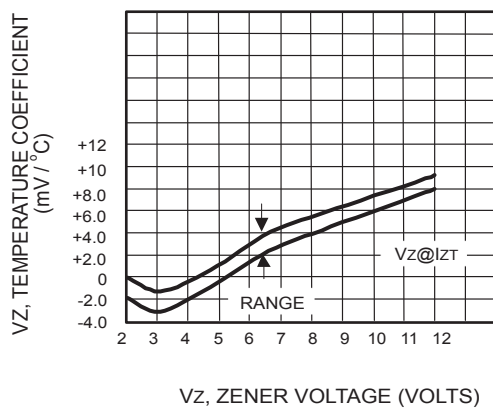


FIG 3. TYPICAL THERMAL RESISTANCE VERSUS LEAD LENGTH

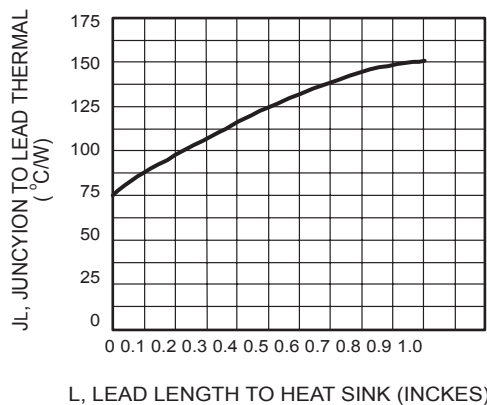


FIG 4. EFFECT OF ZENER CURRENT

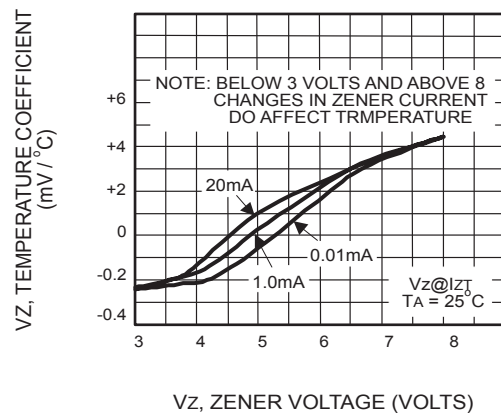
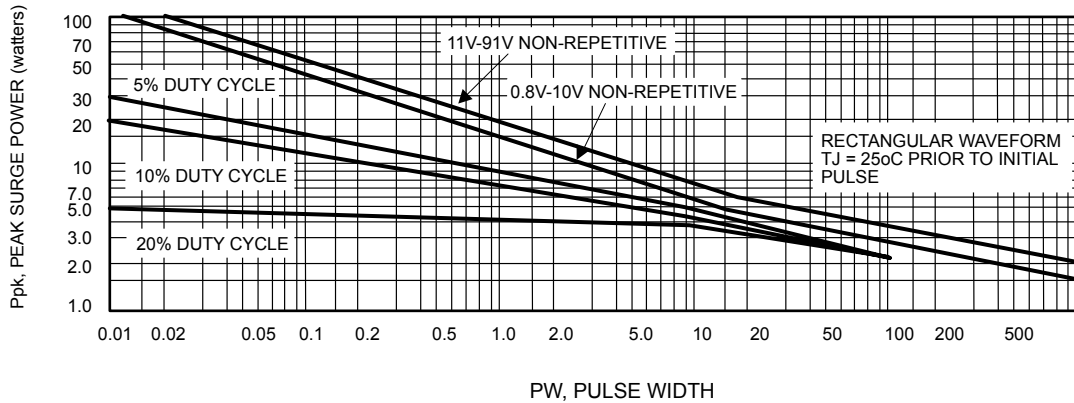


FIG 5. MAXIMUM SURGE POWER



This graph represents 90 percentile data point  
For worse-case design characteristics, multiply surge power by 2/3

FIG 6. EFFECT OF ZENER CURRENT ON ZENER IMPEDANCE

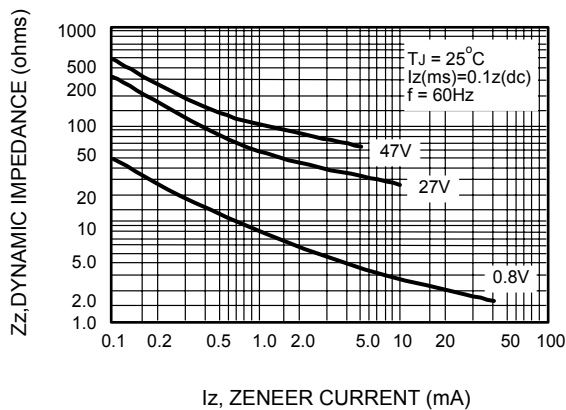


FIG 7. EFFECT OF ZENER VOLTAGE ON ZENER IMPEDANCE

