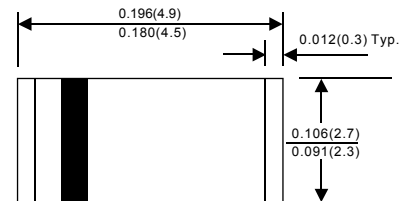
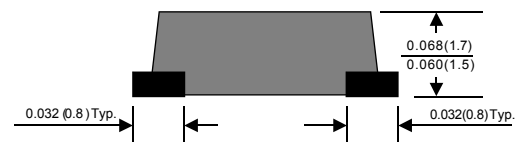


1WATT SURFACE MOUNT ZENER DIODE
SMA-LS PACKAGE
Pb Free Product
FEATURES

- * Low profile package
- * Small size
- * Low inductance
- * High temperature soldering : 260°C /10 seconds at terminals
- * RoHS product for packing code suffix "G"
- Halogen free product for packing code suffix "H"


MECHANICAL DATA

- * Case: Molded SMA-LS
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: Solderable PER MIL-STD-202
- * Method 208 guaranteed
- * Polarity: Color band denotes cathode
- * Mounting Position: Any
- * Weight: 0.05 grams



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	SYMBOL	VALUE	UNIT
Power Dissipation at Tamb=25°C	P _{TOT}	1*	Watt
Junction Temperature	T _J	150	°C
Storage Temperature Range	T _S	-55 to +150	°C

*Valid provided that leads at a distance of 10mm from case kept at ambient temperature.

PARAMETER	SYMBOL	Min.	Typ.	Max.	Amps
Typical Thermal Resistance	R _{ΘJA} / R _{ΘJC}	-	-	110 / 100	K/W
Forward Voltage Range at 200mA DC	V _F	-	-	1.2	V

ELECTRONICAL CHARACTERISTICS TA=25°C

TYPE	Vz@IzT			IzT	Maximum Zener Impedance			Maximum Leakage Current		Marking Code
	Nom.V	Min.V	Max.V		mA	Zzt@IzT	Zzk@Izk	Izk	Ir@VR	
				Ω		Ω	mA	μA	V	SMA-LS
1.0 Watt ZENER										
ZS4728A	3.3	3.1	3.5	76	10	400	1.0	100	1.0	Z3V3
ZS4729A	3.6	3.4	3.8	69	10	400	1.0	100	1.0	Z3V6
ZS4730A	3.9	3.7	4.1	64	9.0	400	1.0	50	1.0	Z3V9
ZS4731A	4.3	4.1	4.5	58	9.0	400	1.0	10	1.0	Z4V3
ZS4732A	4.7	4.5	4.9	53	8.0	500	1.0	10	1.0	Z4V7
ZS4733A	5.1	4.8	5.4	49	7.0	550	1.0	10	1.0	Z5V1
ZS4734A	5.6	5.3	5.9	45	5.0	600	1.0	10	2.0	Z5V6
ZS4735A	6.2	5.9	6.5	41	2.0	700	1.0	10	3.0	Z6V2
ZS4736A	6.8	6.5	7.1	37	3.5	700	1.0	10	4.0	Z6V8
ZS4737A	7.5	7.1	7.9	34	4.0	700	0.5	10	5.0	Z7V5
ZS4738A	8.2	7.8	8.6	31	4.5	700	0.5	10	6.0	Z8V2
ZS4739A	9.1	8.6	9.6	28	5.0	700	0.5	10	7.0	Z9V1
ZS4740A	10.0	9.5	10.5	25	7.0	700	0.25	10	7.6	Z10
ZS4741A	11.0	10.5	11.6	23	8.0	700	0.25	5.0	8.4	Z11
ZS4742A	12.0	11.4	12.6	21	9.0	700	0.25	5.0	9.1	Z12
ZS4743A	13.0	12.4	13.7	19	10	700	0.25	5.0	9.9	Z13
ZS4744A	15.0	14.3	15.8	17	14	700	0.25	5.0	11.4	Z15
ZS4745A	16.0	15.2	16.8	15.5	16	700	0.25	5.0	12.2	Z16
ZS4746A	18.0	17.1	18.9	14.0	20	750	0.25	5.0	13.7	Z18
ZS4747A	20.0	19.0	21.0	12.5	22	750	0.25	5.0	15.2	Z20
ZS4748A	22.0	20.9	23.1	11.5	23	750	0.25	5.0	16.7	Z22
ZS4749A	24.0	22.8	25.2	10.5	25	750	0.25	5.0	18.2	Z24
ZS4750A	27.0	25.7	28.4	9.5	35	750	0.25	5.0	20.6	Z27
ZS4751A	30.0	28.5	31.5	8.5	40	1000	0.25	5.0	22.8	Z30
ZS4752A	33.0	31.4	34.7	7.5	45	1000	0.25	5.0	25.1	Z33
ZS4753A	36.0	34.2	37.8	7.0	50	1000	0.25	5.0	27.4	Z36
ZS4754A	39.0	37.1	41.0	6.5	60	1000	0.25	5.0	29.7	Z39
ZS4755A	43.0	40.9	45.2	6.0	70	1500	0.25	5.0	32.7	Z43
ZS4756A	47.0	44.7	49.4	5.5	80	1500	0.25	5.0	35.8	Z47
ZS4757A	51.0	48.5	53.6	5.0	95	1500	0.25	5.0	38.8	Z51
ZS4758A	56.0	53.2	58.8	4.5	110	2000	0.25	5.0	42.6	Z56
ZS4759A	62.0	58.9	65.1	4.0	125	2000	0.25	5.0	47.1	Z62
ZS4760A	68.0	64.6	71.4	3.7	150	2000	0.25	5.0	51.7	Z68
ZS4761A	75.0	71.3	78.8	3.3	175	2000	0.25	5.0	56.0	Z75
ZS4762A	82.0	77.9	86.1	3.0	200	3000	0.25	5.0	62.2	Z82
ZS4763A	91.0	86.5	95.6	2.8	250	3000	0.25	5.0	69.2	Z91
ZS4764A	100.0	95.0	105.0	2.5	350	3000	0.25	5.0	76.0	Z100

RATINGS AND CHARACTERISTIC CURVES ZS4728A THRU ZS4764A

FIG.1A Range for Units to 12 Volts

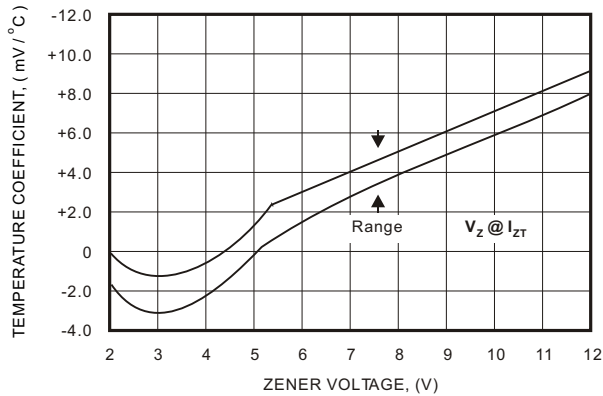


FIG.1B Range for Units to 12 to 100 Volts

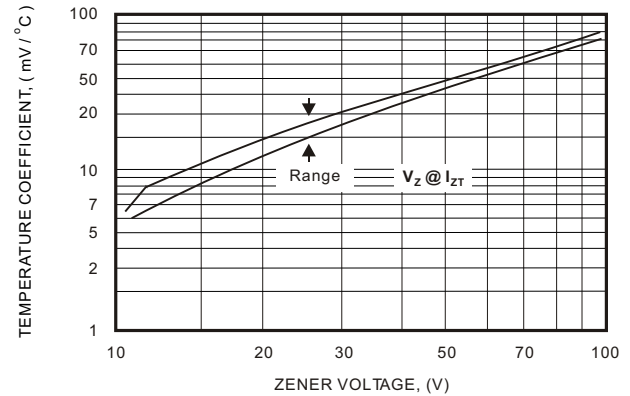


FIG. 2 Temperature Coefficients (-55°C to +150°C temperature change; 90% of the units are in the ranges indicated.)

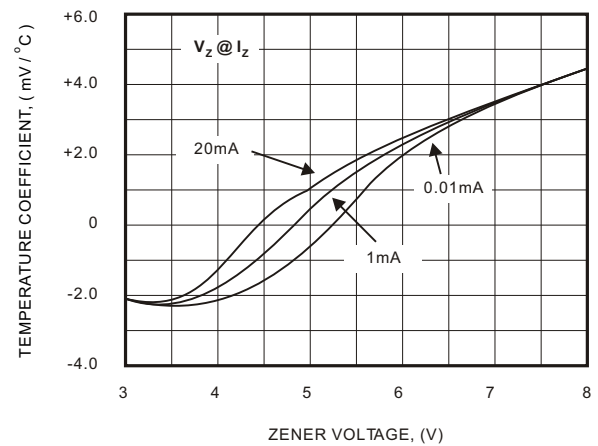
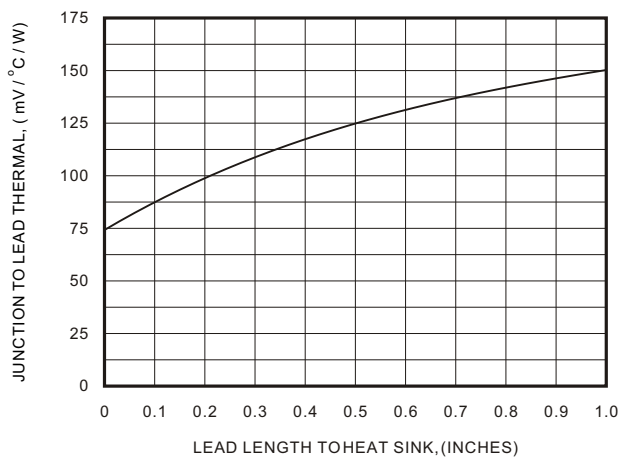


FIG.3 Typical Thermal Resistance versus Lead

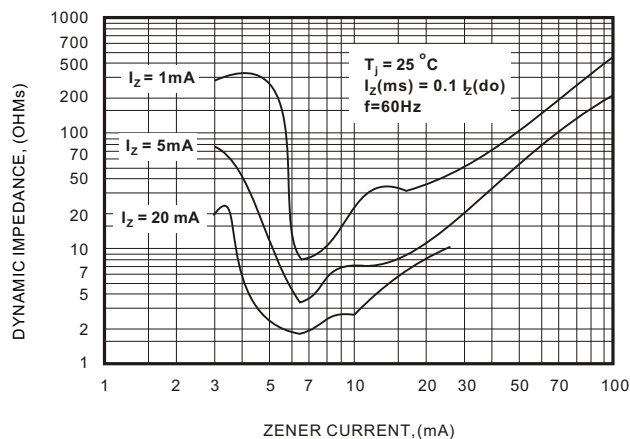
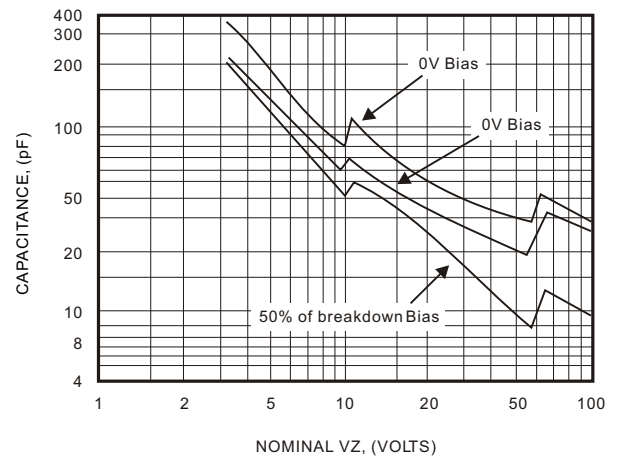
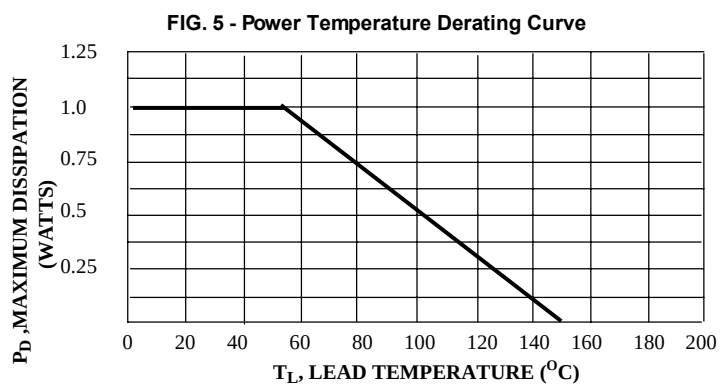


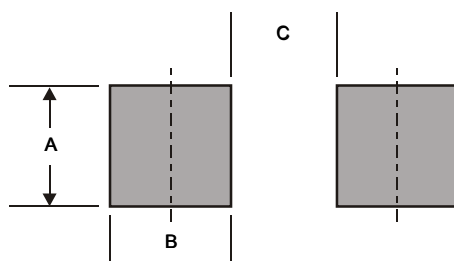
FIG 4. Effect of Zener Current



RATINGS AND CHARACTERISTIC CURVES ZS4728A THRU ZS4764A



Suggested solder pad layout



PACKAGE	A	B	C
SMA-LS	0.110 (2.80)	0.063 (1.60)	0.087 (2.20)