WEITRON

ZS4728A Thru ZS4753A

Surface Mount Zener Diodes

Lead(Pb)-Free

SURFACE MOUNT
ZENER DIODES
1.0 WATTS

Features

*1W Power Dissipation
*For Surface Mounted Applications
*Low zener Impedance
*Low Regulation Factor
*Zener Breakdown Voltage Range 3.3V to 36V

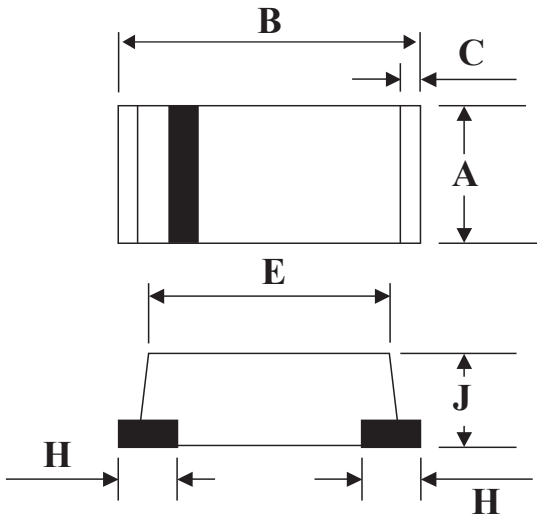
SMA-1

Mechanical Data

*Case : SMA-1
*Terminals : Solderable per MIL-STD-202,Method 208
*Polarity : Color Band Denotes Cathode
*Marking : Marking Code(See Table on Page 2)
*Mounting Position : Any
*Weight : 0.05 grams

SMA-1 Outline Dimension

unit:mm



SMA-1		
Dim	**Min**	**Max**
A	2.40	2.80
B	4.40	4.80
C	0.30	0.30
E	3.80	4.20
H	1.00	1.00
J	1.50	1.70

Maximum Ratings (T_A=25°C Unless Otherwise Noted)

Characteristics	Symbol	Value	Unit
Power Dissipation T_L=55°C	P_D	1.0	W
Maximun junction Temperature	Tj	150	℃
Storage Temperature Range	T_{STG}	−55 to +150	℃

ELECTRICAL CHARACTERISTICS (T_A=25℃ Unless Otherwise Noted VF=1.2V MAX, IF = 200mA for all types)

Device	Device Marking	Zener Voltage		Zener Impedance			Leakage Current		Surge Current
		$VZ(Nom)@I_{ZT}$		$Z_{ZT}@I_{ZT}$	$Z_{ZK}@I_{ZK}$		$I_R@V_R$		$I_{RM}@T_A$=25°C
		Volts	mA	Ω	Ω	mA	μA	Volts	mA
ZS4728A	Z3V3	3.3	76	10	400	1	100	1	1380
ZS4729A	Z3V6	3.6	69	10	400	1	100	1	1260
ZS4730A	Z3V9	3.9	64	9	400	1	50	1	1190
ZS4731A	Z4V3	4.3	58	9	400	1	10	1	1070
ZS4732A	Z4V7	4.7	53	8	500	1	10	1	970
ZS4733A	Z5V1	5.1	49	7	550	1	10	1	890
ZS4734A	Z5V6	5.6	45	5	600	1	10	2	810
ZS4735A	Z6V2	6.2	41	2	700	1	10	3	730
ZS4736A	Z6V8	6.8	37	3.5	700	1	10	4	660
ZS4737A	Z7V5	7.5	34	4	700	0.5	10	5	605
ZS4738A	Z8V2	8.2	31	4.5	700	0.5	10	6	550
ZS4739A	Z9V1	9.1	28	5	700	0.5	10	7	500
ZS4740A	Z10	10	25	7	700	0.25	10	7.6	454
ZS4741A	Z11	11	23	8	700	0.25	5	8.4	414
ZS4742A	Z12	12	21	9	700	0.25	5	9.1	380
ZS4743A	Z13	13	19	10	700	0.25	5	9.9	344
ZS4744A	Z15	15	17	14	700	0.25	5	11.4	304
ZS4745A	Z16	16	15.5	16	700	0.25	5	12.2	285
ZS4746A	Z18	18	14	20	750	0.25	5	13.7	250
ZS4747A	Z20	20	12.5	22	750	0.25	5	15.2	225
ZS4748A	Z22	22	11.5	23	750	0.25	5	16.7	205
ZS4749A	Z24	24	10.5	25	750	0.25	5	18.2	190
ZS4750A	Z27	27	9.5	35	750	0.25	5	20.6	170
ZS4751A	Z30	30	8.5	40	1000	0.25	5	22.8	150
ZS4752A	Z33	33	7.5	45	1000	0.25	5	25.1	135
ZS4753A	Z36	36	7.0	50	1000	0.25	5	27.4	125

NOTE: 1. Based on dc-Measurement at Thermal Equilibrium.
2. Surge current is a non-repetitive, 8.3ms pulse width square wave or equivalent sine-wave superimposed on IZT per JEDEC method
3. SUFFIX “A” FOR ± 5%

Typical Characteristics

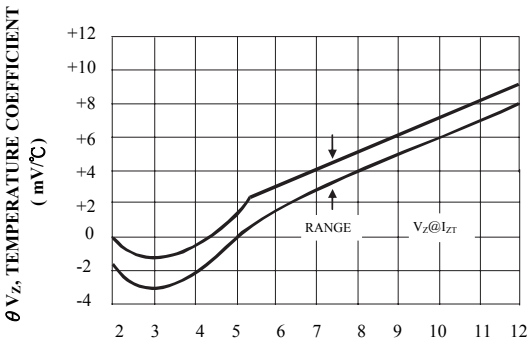


FiG.1 Range for Units to 12 Volts

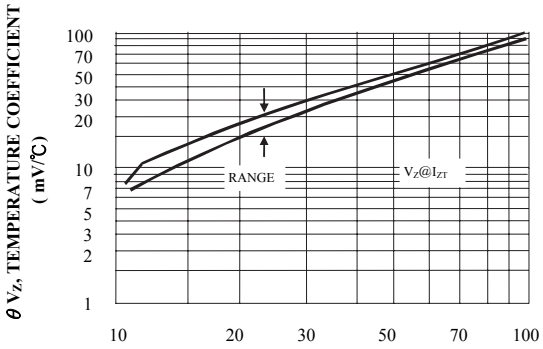


FiG.2 Range for Units to 12 to 36 Volts

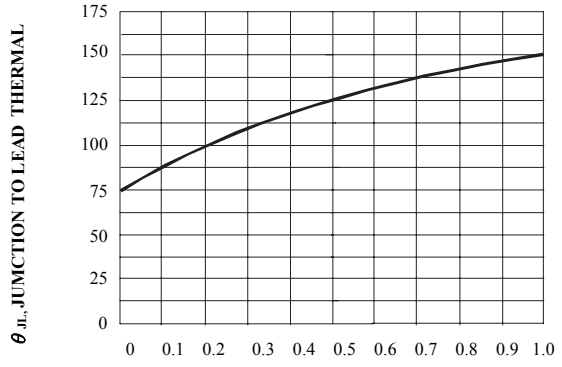


FIG.3 Temperature Coefficients Lead V.S. θ_{JL}

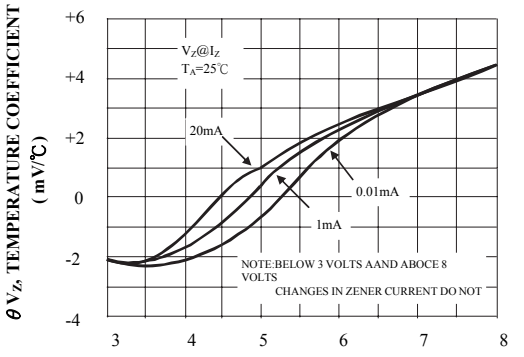


FIG.4 Temperature Coefficients V_Z V.S. θ_{JL}

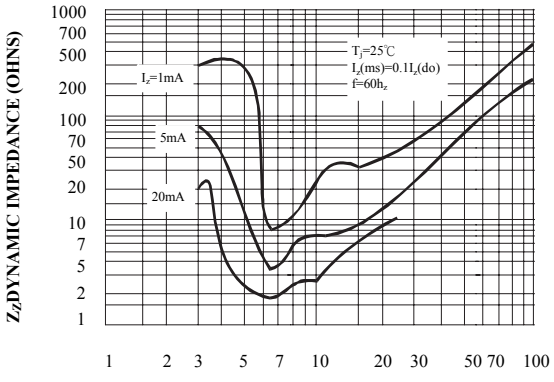


FIG5 Typical Thermal Resistance V.S. Lead

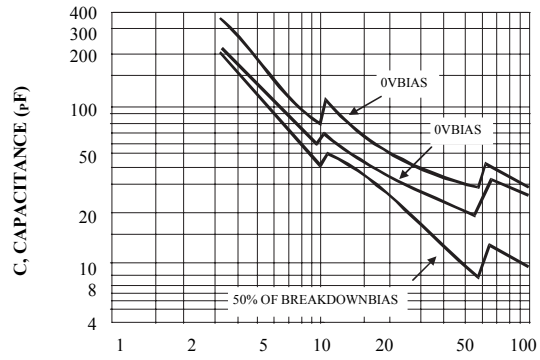


FIG.6 Effect of Zener Current

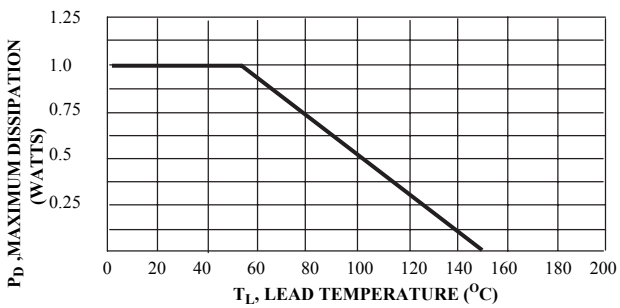


FIG.7 Power Temperature Derating Curve