BZX85C2V7 SERIES

SILICON ZENER DIODE

VOLTAGE	2.7 to 75 V	P	1.3 Watts

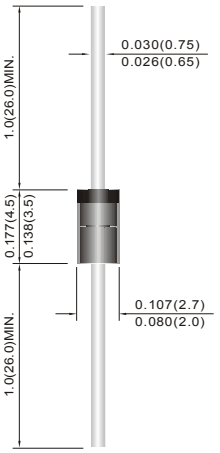
FEATURES

- Low profile package
- Built-in strain relief
- Low inductance
- High temperature soldering : 260°C /10 seconds at terminals
- Glass package has Underwriters Laboratory Flammability Classification
- In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

- Case: Molded Glass DO-41G
- Terminals: Axial leads, solderable per MIL-STD-750, Method 2026 guaranteed
- Polarity: Color band denotes positive end
- Mounting position:Any
- Weight: 0.012 ounce, 0.317 gram

DO-41G Unit : inch(mm)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	Value	Units
Power Dissipation at Tamb = 25 °C	P_{TOT}	1.3*	W
Junction Temperature	T_J	-65 to +200	°C
Storage Temperature Range	T_{STG}	-65 to +200	°C
*Valid provided that leads at a distance of 10mm from case are kept at ambient temperature.			

Parameter	Symbol	Min.	Typ.	Max.	Units
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	--	--	170*	K/W
Forward Voltage at I_F = 200mA	V_F	--	--	1.2	V
*Valid provided that leads at a distance of 10mm from case are kept at ambient temperature.					

Part Numbet	Nominal Zener Voltage			Max.Zener Impedance				Max Reverse Leakage Current		marking code
	Vz@Izt			Zzt @ Izt		Zzk @ Izk		Ir @Vr		
	Nom V	MIN. V	MAX. V	Ω	mA	Ω	mA	V	μA	
BZX85C2V7	2.7	2.50	2.90	20	80.0	400	1.0	1.0	150	BZX85C2V7
BZX85C3V0	3.0	2.80	3.20	20	80.0	400	1.0	1.0	100	BZX85C3V0
BZX85C3V3	3.3	3.10	3.50	20	80.0	400	1.0	1.0	40	BZX85C3V3
BZX85C3V6	3.6	3.40	3.80	20	60.0	500	1.0	1.0	20	BZX85C3V6
BZX85C3V9	3.9	3.70	4.10	15	60.0	500	1.0	1.0	10	BZX85C3V9
BZX85C4V3	4.3	4.00	4.60	13	60.0	500	1.0	1.0	3	BZX85C4V3
BZX85C4V7	4.7	4.40	5.00	13	45.0	600	1.0	1.0	3	BZX85C4V7
BZX85C5V1	5.1	4.80	5.40	10	45.0	500	1.0	1.5	1	BZX85C5V1
BZX85C5V6	5.6	5.20	6.00	7	45.0	400	1.0	2.0	1	BZX85C5V6
BZX85C6V2	6.2	5.80	6.60	4	35.0	300	1.0	3.0	1	BZX85C6V2
BZX85C6V8	6.8	6.40	7.20	3.5	35.0	300	1.0	4.0	1	BZX85C6V8
BZX85C7V5	7.5	7.00	7.90	3	35.0	200	0.5	4.5	1	BZX85C7V5
BZX85C8V2	8.2	7.70	8.70	5	25.0	200	0.5	6.2	1	BZX85C8V2
BZX85C9V1	9.1	8.50	9.60	5	25.0	200	0.5	6.8	1	BZX85C9V1
BZX85C10	10.0	9.40	10.60	7	25.0	200	0.5	7.0	0.5	BZX85C10
BZX85C11	11.0	10.40	11.60	8	20.0	300	0.5	8.2	0.5	BZX85C11
BZX85C12	12.0	11.40	12.70	9	20.0	350	0.5	9.1	0.5	BZX85C12
BZX85C13	13.0	12.40	14.10	10	20.0	400	0.5	10.0	0.5	BZX85C13
BZX85C15	15.0	13.80	15.60	15	15.0	500	0.5	11.0	0.5	BZX85C15
BZX85C16	16.0	15.30	17.10	15	15.0	500	0.5	12.0	0.5	BZX85C16
BZX85C18	18.0	16.80	19.10	20	15.0	500	0.5	13.0	0.5	BZX85C18
BZX85C20	20.0	18.80	21.20	24	10.0	600	0.5	15.0	0.5	BZX85C20
BZX85C22	22.0	20.80	23.30	25	10.0	600	0.5	16.0	0.5	BZX85C22
BZX85C24	24.0	22.80	25.60	25	10.0	600	0.5	18.0	0.5	BZX85C24
BZX85C27	27.0	25.10	28.90	30	8.0	750	0.25	20.0	0.5	BZX85C27
BZX85C30	30.0	28.00	32.00	30	8.0	1000	0.25	22.0	0.5	BZX85C30
BZX85C33	33.0	31.00	35.00	35	8.0	1000	0.25	24.0	0.5	BZX85C33
BZX85C36	36.0	34.00	38.00	40	8.0	1000	0.25	27.0	0.5	BZX85C36
BZX85C39	39.0	37.00	41.00	50	6.0	1000	0.25	30.0	0.5	BZX85C39
BZX85C43	43.0	40.00	46.00	50	6.0	1000	0.25	33.0	0.5	BZX85C43
BZX85C47	47.0	44.00	50.00	90	4.0	1500	0.25	36.0	0.5	BZX85C47
BZX85C51	54.0	48.00	54.00	115	4.0	1500	0.25	39.0	0.5	BZX85C51
BZX85C56	56.0	52.00	60.00	120	4.0	2000	0.25	43.0	0.5	BZX85C56
BZX85C62	62.0	58.00	66.00	125	4.0	2000	0.25	47.0	0.5	BZX85C62
BZX85C68	68.0	64.00	72.00	130	4.0	2000	0.25	51.0	0.5	BZX85C68
BZX85C75	75.0	70.00	79.00	135	4.0	2000	0.25	56.0	0.5	BZX85C75

STANDARD VOLTAGE TOLERANCE IS +5% AND:

SUFFIX"A" FOR +1%

SUFFIX"B" FOR +2%

SUFFIX"C" FOR +5%

SUFFIX"D" FOR +20%

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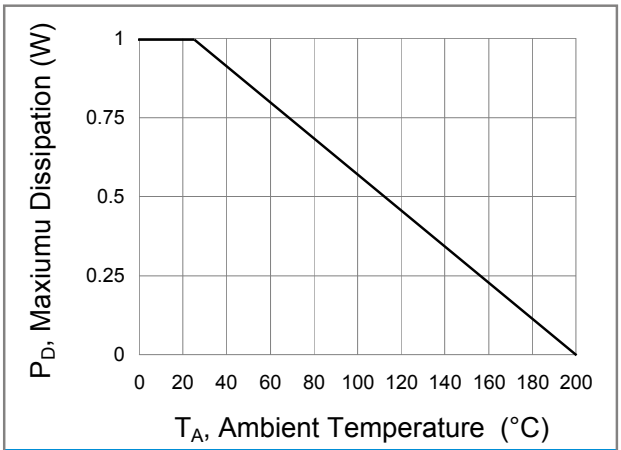

Fig.1 Steady-State Power Derating Curve

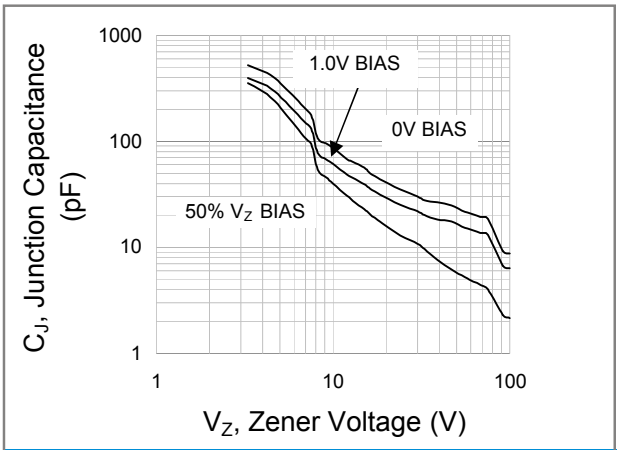

Fig.2 Typical Junction Capacitance

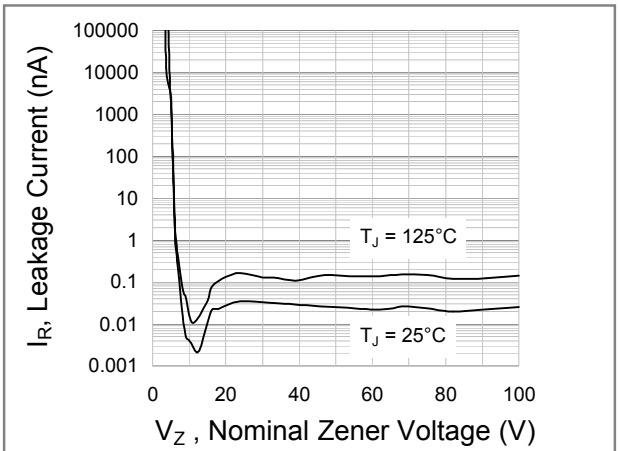

Fig.3 Typical Leakage Characteristics

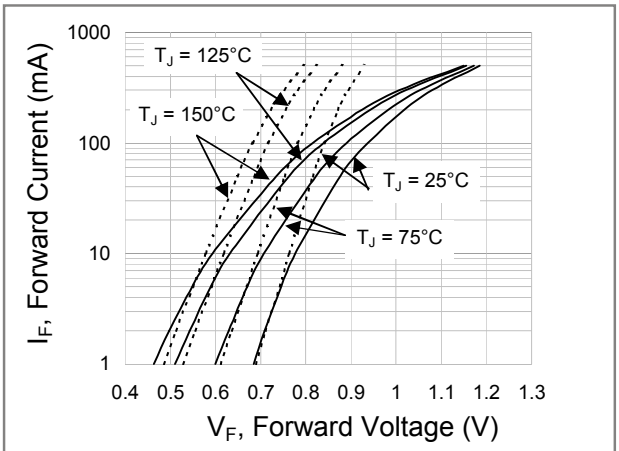

Fig.4 Typical Forward Characteristics

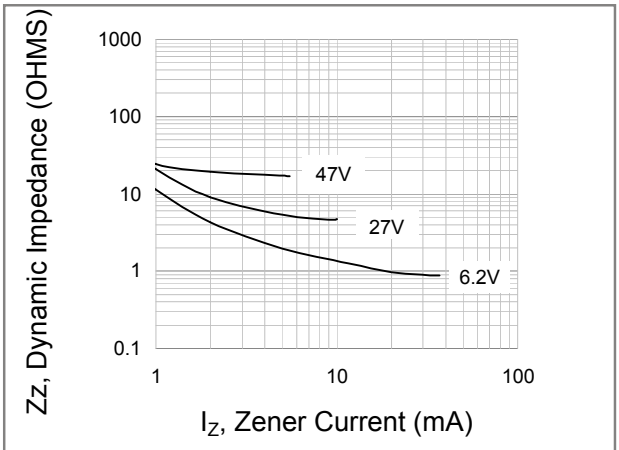

Fig.5 Typical Effect Of Zener Current On Zener Impedance

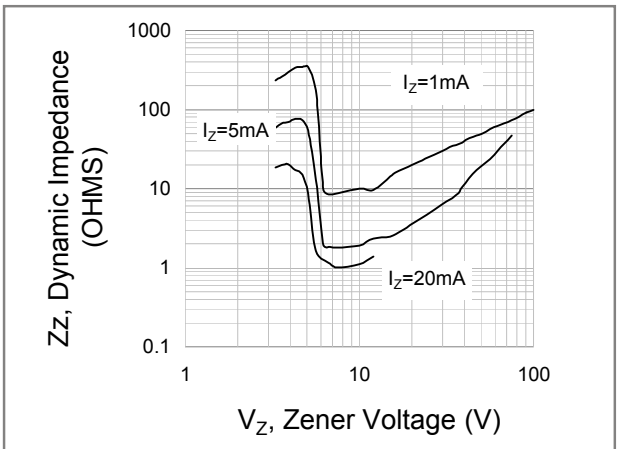

Fig.6 Typical Effect Of Zener Voltage On Zener Impedance

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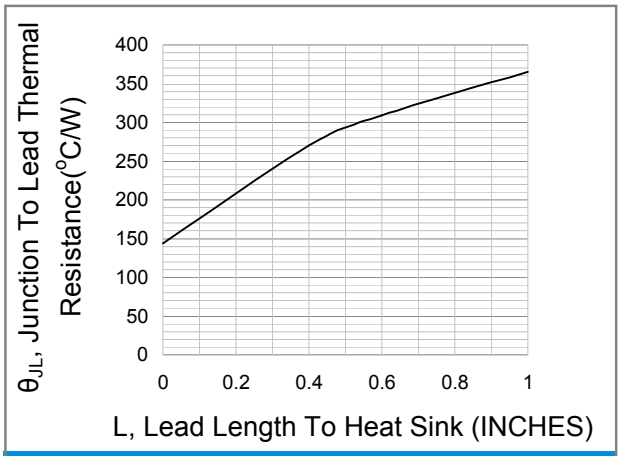

Fig.7 Thermal Resistance Versus Lead Length

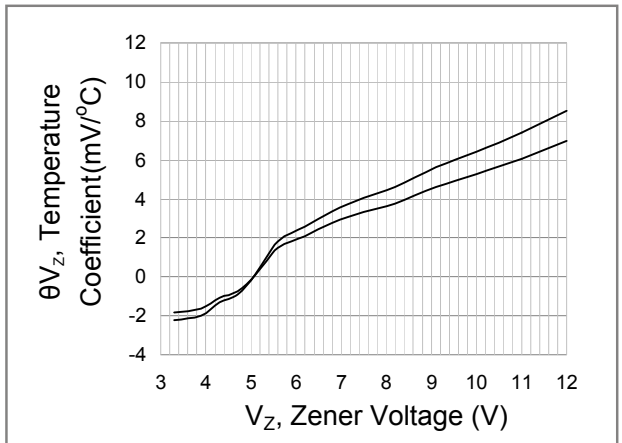

Fig.8 Temperature Coefficient (+25°C To +150°C Temperature Range ; 90% Of The Units Are In The Ranges Indicated)

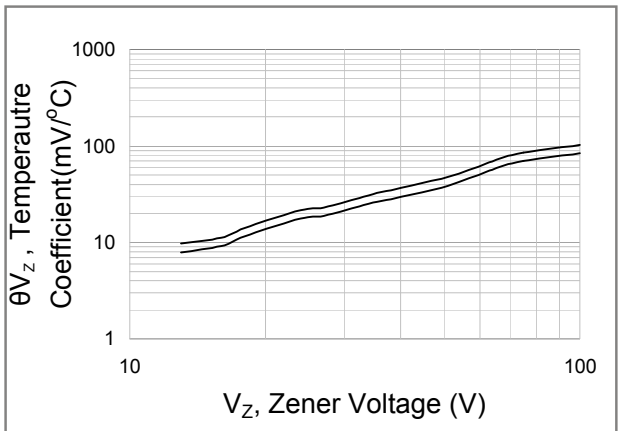

Fig.9 Temperature Coefficient (+25°C To +150°C Temperature Range ; 90% Of The Units Are In The Ranges Indicated)