

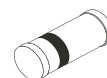
SILICON PLANAR ZENER DIODE

FEATURES

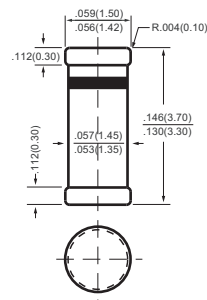
- * Zener Voltage Range 4.7 to 36 Volts
- * LL-34 (Mini-MELF) Package
- * Hermetically Sealed, Glass Silicon Diodes

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.



SOD-80C



Dimensions in inches and (millimeters)

MAXIMUM RATINGS (@ TA = 25°C unless otherwise noted)

RATINGS	SYMBOL	VALUE	UNITS
Average Forward Current (averaged Over any 20 ms period)	$I_{F(av)}$	250	mA
Repetitive Peak Forward Current	I_{FRM}	250	mA
Total Power Dissipation up to $T_{flange}=50^{\circ}C$	P_{tot}	500	mW
Up to $T_a=50^{\circ}C$ and Mounted on a Ceramic Substrate of 10mm x 10 mm x 0.6mm	P_{tot}	400	mW
Non-Repetitive Peak Reverse Power Dissipation $t=100\mu s, T_J=150^{\circ}C$	P_{ZSM}	30	W
Storage Temperature	T_{stg}	-65 to +200	°C
Junction Temperature	T_J	200	°C

THERMAL RESISTANCE

From Junction to tie-point(flanges)	$R_{th(j-tp)}$	0.30	K/mW
Form Junction to Ambient when Mounted on a Ceramic Substrate of 10mm x 10mm x 0.6mm	$R_{th(j-a)}$	0.38	K/mW

ELECTRICAL CHARACTERISTICS (@TA=25°C unless otherwise specified)

TYPE	V _{ZT} @I _{ZT} (V)		R _{ZT} @I _{ZT} (Ω) MAX	I _{ZT} (mA)	I _R @T _A =25°C (uA) MAX	V _R (V)	V _F @ 100mA (V)
	MIN	MAX					
BZV55C 4.7BS	4.47	4.91	100	5.0	5.0	1.0	1.0
BZV55C 4.7BSA	4.47	4.65					
BZV55C 4.7BSB	4.59	4.77					
BZV55C 4.7BSC	4.71	4.91					
BZV55C 5.1BS	4.85	5.35	70	5.0	5.0	1.5	1.0
BZV55C 5.1BSA	4.85	5.03					
BZV55C 5.1BSB	4.97	5.18					
BZV55C 5.1BSC	5.12	5.35					
BZV55C 5.6BS	5.29	5.88	40	5.0	5.0	2.5	1.0
BZV55C 5.6BSA	5.29	5.52					
BZV55C 5.6BSB	5.46	5.70					
BZV55C 5.6BSC	5.64	5.88					
BZV55C 6.2BS	5.81	6.40	30	5.0	5.0	3.0	1.0
BZV55C 6.2BSA	5.81	6.06					
BZV55C 6.2BSB	5.99	6.24					
BZV55C 6.2BSC	6.16	6.40					
BZV55C 6.8BS	6.32	6.97	25	5.0	2.0	3.5	1.0
BZV55C 6.8BSA	6.32	6.59					
BZV55C 6.8BSB	6.52	6.79					
BZV55C 6.8BSC	6.70	6.97					
BZV55C 7.5BS	6.88	7.64	25	5.0	0.5	4.0	1.0
BZV55C 7.5BSA	6.88	7.19					
BZV55C 7.5BSB	7.11	7.41					
BZV55C 7.5BSC	7.33	7.64					
BZV55C 8.2BS	7.56	8.41	20	5.0	0.5	5.0	1.0
BZV55C 8.2BSA	7.56	7.90					
BZV55C 8.2BSB	7.82	8.15					
BZV55C 8.2BSC	8.07	8.41					
BZV55C 9.1BS	8.33	9.29	20	5.0	0.5	6.0	1.0
BZV55C 9.1BSA	8.33	8.70					
BZV55C 9.1BSB	8.61	8.99					
BZV55C 9.1BSC	8.89	9.29					
BZV55C 10BS	9.19	10.30	20	5.0	0.2	7.0	1.0
BZV55C 10BSA	9.19	9.59					
BZV55C 10BSB	9.48	9.90					
BZV55C 10BSC	9.82	10.30					
BZV55C 11BS	10.18	11.26	20	5.0	0.2	8.0	1.0
BZV55C 11BSA	10.18	10.36					
BZV55C 11BSB	10.50	10.95					
BZV55C 11BSC	10.82	11.26					

ELECTRICAL CHARACTERISTICS (@TA=25°C unless otherwise specified)

TYPE	V _{ZT} @I _{ZT} (V)		R _{ZT} @I _{ZT} (Ω) MAX	I _{ZT} (mA)	I _R @T _A =25°C (uA) MAX	V _R (V)	V _F @ 100mA (V)
	MIN	MAX					
BZV55C 12BS	11.13	12.30	25	5.0	0.2	9.0	1.0
BZV55C 12BSA	11.13	11.63					
BZV55C 12BSB	11.50	11.92					
BZV55C 12BSC	11.80	12.30					
BZV55C 13BS	12.18	13.62	26	5.0	0.2	10	1.0
BZV55C 13BSA	12.18	12.71					
BZV55C 13BSB	12.59	13.16					
BZV55C 13BSC	13.03	13.62					
BZV55C 15BS	13.48	15.02	30	5.0	0.2	11	1.0
BZV55C 15BSA	13.48	14.09					
BZV55C 15BSB	13.95	14.56					
BZV55C 15BSC	14.42	15.02					
BZV55C 16BS	14.87	16.50	40	5.0	0.2	12	1.0
BZV55C 16BSA	14.87	15.50					
BZV55C 16BSB	15.33	15.96					
BZV55C 16BSC	15.79	16.50					
BZV55C 18BS	16.34	18.30	50	5.0	0.2	13	1.0
BZV55C 18BSA	16.34	17.06					
BZV55C 18BSB	16.90	17.67					
BZV55C 18BSC	17.51	18.30					
BZV55C 20BS	18.14	20.45	55	5.0	0.2	15	1.0
BZV55C 20BSA	18.14	18.96					
BZV55C 20BSB	18.80	19.68					
BZV55C 20BSC	19.52	20.45					
BZV55C 22BS	20.23	22.61	55	5.0	0.2	17	1.0
BZV55C 22BSA	20.23	21.08					
BZV55C 22BSB	20.76	21.65					
BZV55C 22BSC	21.22	22.09					
BZV55C 22BSD	21.68	22.61	80	5.0	0.2	19	1.0
BZV55C 24BS	22.26	24.81					
BZV55C 24BSA	22.26	23.12					
BZV55C 24BSB	22.75	23.73					
BZV55C 24BSC	23.29	24.72	80	5.0	0.2	21	1.0
BZV55C 24BSD	23.81	24.81					
BZV55C 27BS	24.26	27.64					
BZV55C 27BSA	24.26	25.52					
BZV55C 27BSB	24.97	26.26					
BZV55C 27BSC	25.63	26.95					
BZV55C 27BSD	26.29	27.64					

ELECTRICAL CHARACTERISTICS (@TA=25°C unless otherwise specified)

TYPE	V _{ZT} @I _{ZT} (V)		R _{ZT} @I _{ZT} (Ω) MAX	I _{ZT} (mA)	I _R @T _A =25°C (uA) MAX	V _R (V)	V _F @ 100mA (V)
	MIN	MAX					
BZV55C 30BS	26.99	30.51	80	5.0	0.2	23	1.0
BZV55C 30BSA	26.99	28.39					
BZV55C 30BSB	27.70	29.13					
BZV55C 30BSC	28.36	29.82					
BZV55C 30BSD	29.02	30.51					
BZV55C 33BS	29.68	33.11	80	5.0	0.2	25	1.0
BZV55C 33BSA	29.68	31.22					
BZV55C 33BSB	30.32	31.88					
BZV55C 33BSC	30.90	32.50					
BZV55C 33BSD	31.49	33.11					
BZV55C 36BS	32.14	35.77	80	5.0	0.2	27	1.0
BZV55C 36BSA	32.14	33.79					
BZV55C 36BSB	32.79	34.49					
BZV55C 36BSC	33.40	35.13					
BZV55C 36BSD	34.01	35.77					

NOTES: 1. Pulse Condition : 20mS < t_p < 50mS, Duty Cycle < 2%.

2. "Fully RoHS Compliant", "100% Sn Plating (Pb-free)".

PACKAGING OF DIODE AND BRIDGE RECTIFIERS

REEL PACK

PACKAGE	PACKING CODE	EA PER REEL	EA PER INNER BOX	COMPONENT SPACE (mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
Mini-MELF	-T	2,500	---	---	---	178	390*205*310	100,000	7.10
Mini-MELF	-W	10,000	---	---	---	330	360*355*360	160,000	10.27

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