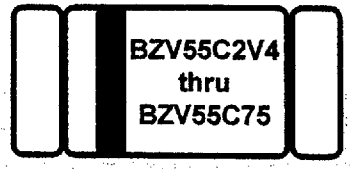
MINI-MELF-SMD



0.5 Watt Zener Diodes

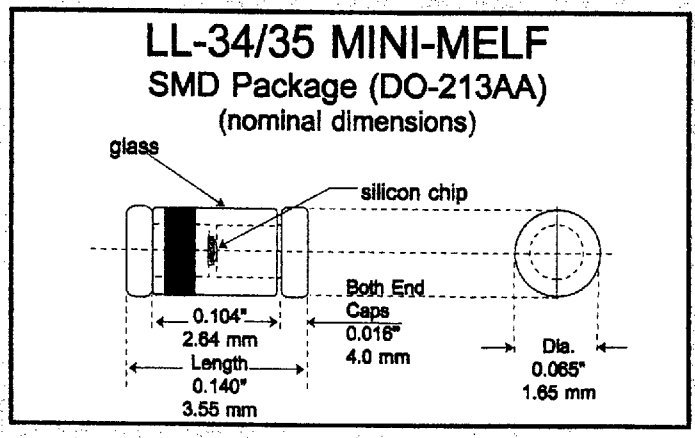
Use Advantages

Glass SOD-80

This family is equivalent to the European PRO Electron types.
The specifications reflect similar low zener test currents over voltage ranges.
Full performance replacement for plastic SOT-23 zener diodes.
Occupies the same footprint as plastic SMA & SOD 123, no PC board rework.
MELF vs. SMA - possible savings are as much as 50% .
Compatible with all major automatic pick and place SM mounting equipment.
May be used on ceramic boards along with high temperature IR solder reflow.

Features

- Six Sigma quality
- High surge capability
- Humidity proof glass
- Metallurgically bonded
- Thermally matched system
- No applications restrictions
- BKC's Sigma Bond™ plating for problem free solderability
- Screening capability to Source Control Drawings
- DO-35 leaded glass package available



Absolute Maximum Ratings	Symbol	Value	Unit
Power Dissipation at $T_{End\ Cap}$ = 25 °C	P_{tot}	0.5	Watt
Junction Temperature	T_j	175	°C
Operating and Storage Temperature Range	T_s	-55 to +175	°C

Characteristics at T = 25 °C	Symbol	Limit	Unit
Power derating at $T_{End\ Cap}$ = 25 °C	P_{DR}	3.0 (Max)	mW/°C
Forward Voltage at I_F = 100 mA	V_F	1.5 (Max)	Volts

DO-35 leaded glass package available.

DETAILED SPECIFICATIONS ON REVERSE

BKC Semiconductors Inc.

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MINI-MELF-SMD
BZV55C2V4 thru BZV55C75



0.5 Watt Zener Diodes
Detail Specifications

Type	Nominal Zener Voltage (V_Z) @ I_{Zt} Volts	mA	Maximum Zener Impedance Zzt @ I_{Zt} Ohms	Maximum Reverse Leakage Current (I_R) µA	@ V_R Volts	Maximum Zener Current (I_{ZM}) mA	Typical Temp.Coef. of Zener Voltage %/°C
BZV55C2V4	2.2-2.6	5.0	100	50	1.0	208	-0.075
BZV55C2V7	2.5-2.9	5.0	100	20	1.0	185	-0.075
BZV55C3	2.8-3.2	5.0	95	10	1.0	167	-0.07
BV55C3V3	3.1-3.5	5.0	95	5	1.0	152	-0.06
BZ55C3V6	3.4-3.8	5.0	90	5	1.0	139	-0.055
BZV55C3V9	3.7-4.1	5.0	90	3	1.0	128	-0.045
BZV55C4V3	4.0-4.6	5.0	90	3	1.0	116	-0.01
BZV55C4V7	4.4-5.0	5.0	80	3	2.0	106	+0.01
BZV55C5V1	4.8-5.4	5.0	60	2	2.0	96	+0.025
BZV55C5V6	5.2-6.0	5.0	40	1	2.0	89	+0.035
BZV55C6V2	5.8-6.6	5.0	10	3	4.0	81	+0.04
BZV55C6V8	6.4-7.2	5.0	15	2	4.0	74	+0.044
BZV55C7V5	7.0-7.9	5.0	15	1	5.0	67	+0.051
BZV55C8V2	7.7-8.7	5.0	15	0.7	5.0	61	+0.055
BZV55C9V1	8.5-9.6	5.0	15	0.5	6.0	55	+0.061
BZV55C10	9.4-10.6	5.0	20	0.1	7.0	50	+0.065
BZV55C11	10.4-11.6	5.0	20	0.1	8.0	45	+0.068
BZV55C12	11.4-12.7	5.0	25	0.1	8.0	42	+0.07
BZV55C13	12.4-14.1	5.0	30	0.1	8.0	38	+0.075
BZV55C15	13.8-15.6	5.0	30	0.05	10.5	33	+0.079
BZV55C16	15.3-17.1	5.0	40	0.05	11.2	31	+0.080
BZV55C18	16.8-19.1	5.0	45	0.05	12.6	28	+0.083
BZV55C20	18.8-19.1	5.0	55	0.05	14	25	+0.085
BZV55C22	20.8-23.3	5.0	55	0.05	15.4	23	+0.087
BZV55C24	22.8-25.6	5.0	70	0.05	16.8	21	+0.090
BZV55C27	25.1-28.9	2.0	80	0.05	18.9	19	+0.091
BZV55C30	28.0-32.0	2.0	80	0.05	21	17	+0.093
BZV55C33	31.0-35.0	2.0	80	0.05	23.1	15	+0.094
BZV55C36	34.0-38.0	2.0	90	0.05	25.2	14	+0.094
BZV55C39	37.0-41.0	2.0	130	0.05	27.3	13	+0.095
BZV55C43	40.0-46.0	2.0	150	0.05	30.1	12	+0.095
BZV55C47	44.0-50.0	2.0	170	0.05	32.9	11	+0.096
BZV55C51	48.0-54.0	2.0	180	0.05	35.7	9.9	+0.096
BZV55C56	52.0-60.0	2.0	200	0.05	39.2	8.9	+0.096
BZV55C62	58.0-66.0	2.0	215	0.05	43.4	8.0	+0.097
BZV55C68	64.0-72.0	2.0	240	0.05	47.6	7.4	+0.097
BZV55C75	70.0-79.0	2.0	255	0.05	52.5	6.7	+0.098

Voltage tolerance is ± 5 %. Consult factory :
for 3% tolerance BZV55F series
for 2% tolerance BZV55B series
for 1% tolerance BZV55A series
Also available in a DO-35 Glass package.

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