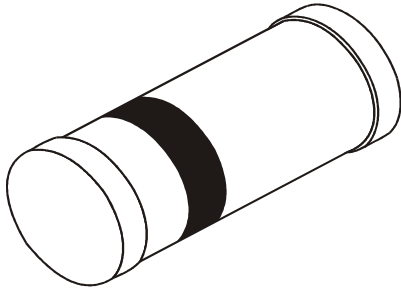


**SILICON PLANAR ZENER DIODES**

**BZV55C 3V6 to 75V**



**SOD - 80C  
Mini MELF (LL-34)**

**Polarity : Cathode is indicated by a blue band**

**Hermetically Sealed, Glass Silicon Diodes**

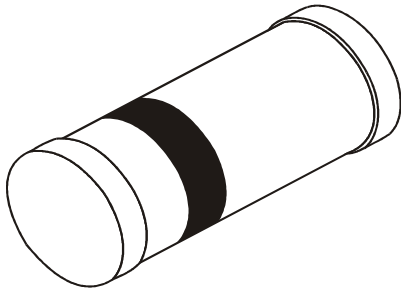
**ABSOLUTE MAXIMUM RATINGS (T<sub>a</sub>=25°C)**

DESCRIPTION	SYMBOL	VALUE	UNIT
Average Forward Current (averaged Over any 20 ms period)	I <sub>F(av)</sub>	250	mA
Repetitive Peak Forward Current	I <sub>FRM</sub>	250	mA
Total Power Dissipation up to T <sub>flange</sub> =50°C	P <sub>tot</sub>	500	mW
Up to T <sub>a</sub> =50°C and Mounted on a Ceramic Substrate of 10mm x 10mm x 0.6mm	P <sub>tot</sub>	400	mW
Non-Repetitive Peak Reverse Power Dissipation t=100ms, T <sub>j</sub> =150°C	P <sub>ZSM</sub>	30	W
Storage Temperature	T <sub>stg</sub>	- 65 to +200	°C
Junction Temperature	T <sub>j</sub>	200	°C
<b>Thermal Resistance</b>			
From Junction to tie-point (flanges)	R <sub>th (j-tp)</sub>	0.30	K/mW
From Junction to Ambient when Mounted on a Ceramic Substrate of 10 mm x 10 mm x 0.6 mm	R <sub>th (j-a)</sub>	0.38	K/mW

**ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°C unless specified otherwise)**

**V<sub>F</sub>=0.9V max @ 10mA**

Device	Working Voltage*		Differential * Resistance r <sub>diff</sub> (W) @ I <sub>Z test</sub> =5mA	Temperature Coefficient S <sub>Z</sub> (mV/K) @ I <sub>Z test</sub> =5mA		Differential Resistance r <sub>diff</sub> (W) @ I <sub>Z test</sub> =1mA	I <sub>R</sub> @ T <sub>a</sub> 25°C (mA) max	V <sub>R</sub> (V)
	V <sub>Z</sub> (V) @ I <sub>Z test</sub> =5mA min	max		min	max			
BZV55C 3V6	3.40	3.80	90	-3.5	0	600	5.0	1.0
BZV55C 3V9	3.70	4.10	90	-3.5	0	600	3.0	1.0
BZV55C 4V3	4.00	4.60	90	-3.5	0	600	3.0	1.0
BZV55C 4V7	4.40	5.00	80	-3.5	0.2	500	3.0	2.0
BZV55C 5V1	4.80	5.40	60	-2.7	1.2	480	2.0	2.0
BZV55C 5V6	5.20	6.00	40	-2.0	2.5	400	1.0	2.0
BZV55C 6V2	5.80	6.60	10	0.4	3.7	150	3.0	4.0
BZV55C 6V8	6.40	7.20	15	1.2	4.5	80	2.0	4.0
BZV55C 7V5	7.00	7.90	15	2.5	5.3	80	1.0	5.0
BZV55C 8V2	7.70	8.70	15	3.2	6.2	80	0.7	5.0
BZV55C 9V1	8.50	9.60	15	3.8	7.0	100	0.5	6.0
BZV55C 10	9.40	10.60	20	4.5	8.0	150	0.2	7.0
BZV55C 11	10.40	11.60	20	5.4	9.0	150	0.1	8.0
BZV55C 12	11.40	12.70	25	6.0	10.0	150	0.1	8.0
BZV55C 13	12.40	14.10	30	7.0	11.0	170	0.1	8.0
BZV55C 15	13.80	15.60	30	9.2	13.0	200	0.05	10.5



SOD - 80C  
Mini MELF (LL-34)

Polarity : Cathode is indicated by a blue band

ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°C unless specified otherwise)

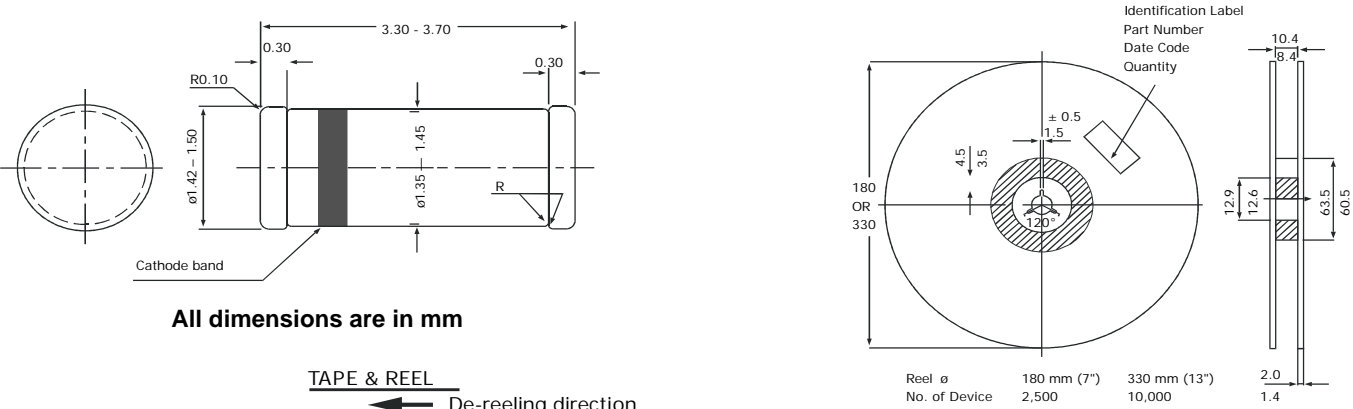
V<sub>F</sub>=0.9V max @ 10mA

Device	Working Voltage*		Differential * Resistance r <sub>diff</sub> (W) @ I <sub>Z test</sub> =5mA max	Temperature Coefficient S <sub>Z</sub> (mV/K) @ I <sub>Z test</sub> =5mA		Differential Resistance r <sub>diff</sub> (W) @ I <sub>Z test</sub> =1mA max	I <sub>R</sub> @ T <sub>a</sub> 25°C (mA) max	V <sub>R</sub> (V)
	min	max		min	max			
BZV55C 16	15.30	17.10	40	10.4	14.0	200	0.05	11.2
BZV55C 18	16.80	19.10	45	12.4	16.0	225	0.05	12.6
BZV55C 20	18.80	21.20	55	14.4	18.0	225	0.05	14.0
BZV55C 22	20.80	23.30	55	16.4	20.0	250	0.05	15.4
BZV55C 24	22.80	25.60	70	18.4	22.0	250	0.05	16.8
	@ I <sub>Z test</sub> =2mA		@ I <sub>Z test</sub> =2mA	@ I <sub>Z test</sub> =2mA		@ I <sub>Z test</sub> =0.5mA		
BZV55C 27	25.10	28.90	80	21.4	25.3	300	0.05	18.9
BZV55C 30	28.00	32.00	80	24.4	29.4	300	0.05	21.0
BZV55C 33	31.00	35.00	80	27.4	33.4	325	0.05	23.1
BZV55C 36	34.00	38.00	90	30.4	37.4	350	0.05	25.2
BZV55C 39	37.00	41.00	130	33.4	41.2	350	0.05	27.3
BZV55C 43	40.00	46.00	150	37.6	46.6	375	0.05	30.1
BZV55C 47	44.00	50.00	170	42.0	51.8	375	0.05	32.9
BZV55C 51	48.00	54.00	180	46.6	57.2	400	0.05	35.7
BZV55C 56	52.00	60.00	200	52.2	63.8	425	0.05	39.2
BZV55C 62	58.00	66.00	215	58.8	71.6	450	0.05	43.4
BZV55C 68	64.00	72.00	240	65.6	79.8	475	0.05	47.6
BZV55C 75	70.00	79.00	255	73.4	88.6	500	0.05	52.5

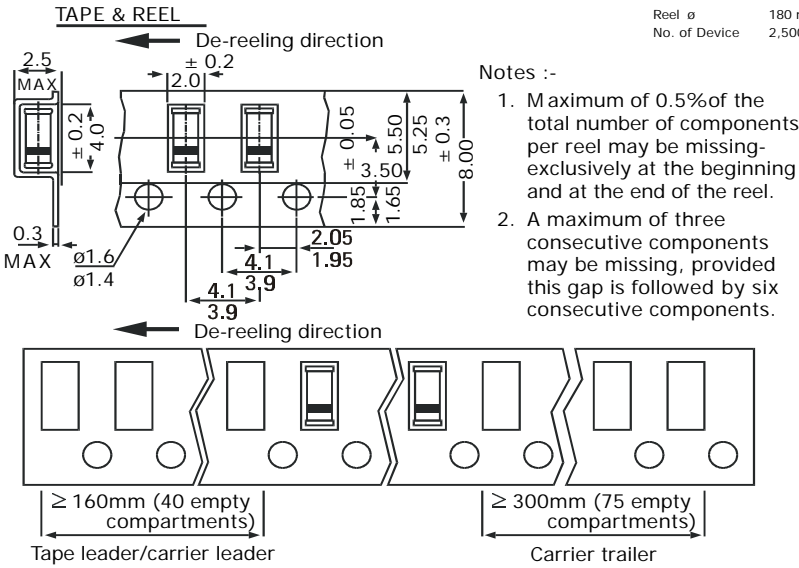
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\*Pulse test: 20ms ≤ t<sub>p</sub> ≤ 50ms

SOD 80C (LL-34) Mini MELF Hermetically Sealed Glass Package



All dimensions are in mm



Packing Detail

PACKAGE	STANDARD PACK		INNER CARTON BOX		OUTER CARTON BOX		
	Details	Net Weight/Qty	Size	Qty	Size	Qty	Gr Wt
SOD-80C T&R	2.5K/feel	100 gm/3K pcs	3" x 7.5" x 7.5"	10.0K	17" x 15" x 13.5"	160.0K	10 kgs
	10K/feel	400 gm/10K pcs	13" x 13" x 0.5"	10.0K	17" x 15" x 13.5"	300.0K	15 kgs

### **Disclaimer**

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Continental Device India Limited

C-120 Naraina Industrial Area, New Delhi 110 028, India.

Telephone + 91-11-2579 6150, 5141 1112 Fax + 91-11-2579 5290, 5141 1119

email@cdil.com www.cdilsemi.com

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