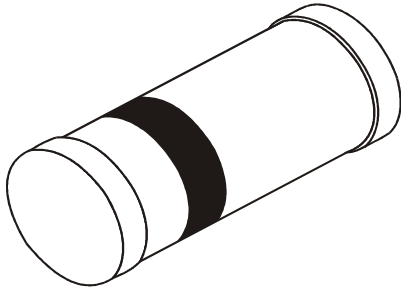


SILICON PLANAR ZENER DIODES

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 ($T_a=25^\circ\text{C}$)

DESCRIPTION	SYMBOL	VALUE	UNIT
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 $T_{flange}=50^\circ\text{C}$	P_{tot}	500	mW
Up to $T_a=50^\circ\text{C}$ and Mounted on a Ceramic Substrate of 10mm x 10mm x 0.6mm	P_{tot}	400	mW
Non-Repetitive Peak Reverse Power Dissipation $t=100\text{ms}$, $T_j=150^\circ\text{C}$	P_{ZSM}	30	W
Storage Temperature	T_{stg}	- 65 to +200	$^\circ\text{C}$
Junction Temperature	T_j	200	$^\circ\text{C}$
Thermal Resistance			
From Junction to tie-point (flanges)	$R_{th(j-tp)}$	0.30	K/mW
From Junction to Ambient when Mounted on a Ceramic Substrate of 10 mm x 10 mm x 0.6 mm	$R_{th(j-a)}$	0.38	K/mW

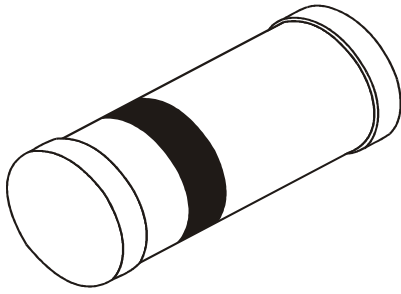
ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$ unless specified otherwise)

$V_F=0.9\text{V max @ }10\text{mA}$

Device	Working Voltage* +/- 5% $V_Z(\text{V})$ @ $I_{Z\text{ test}}=5\text{mA}$		Differential * Resistance $r_{diff}(\text{W})$ @ $I_{Z\text{ test}}=5\text{mA}$ max	Temperature Coefficient $S_z(\text{mV/K})$ @ $I_{Z\text{ test}}=5\text{mA}$		Differential Resistance $r_{diff}(\text{W})$ @ $I_{Z\text{ test}}=1\text{mA}$ max	I_R @ T_a 25 $^\circ\text{C}$ (mA) max	V_R (V)
	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

SILICON PLANAR ZENER DIODES

BZV55C 3V6 to 75V



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

Polarity : Cathode is indicated by a blue band

ELECTRICAL CHARACTERISTICS (T_a=25°C unless specified otherwise)

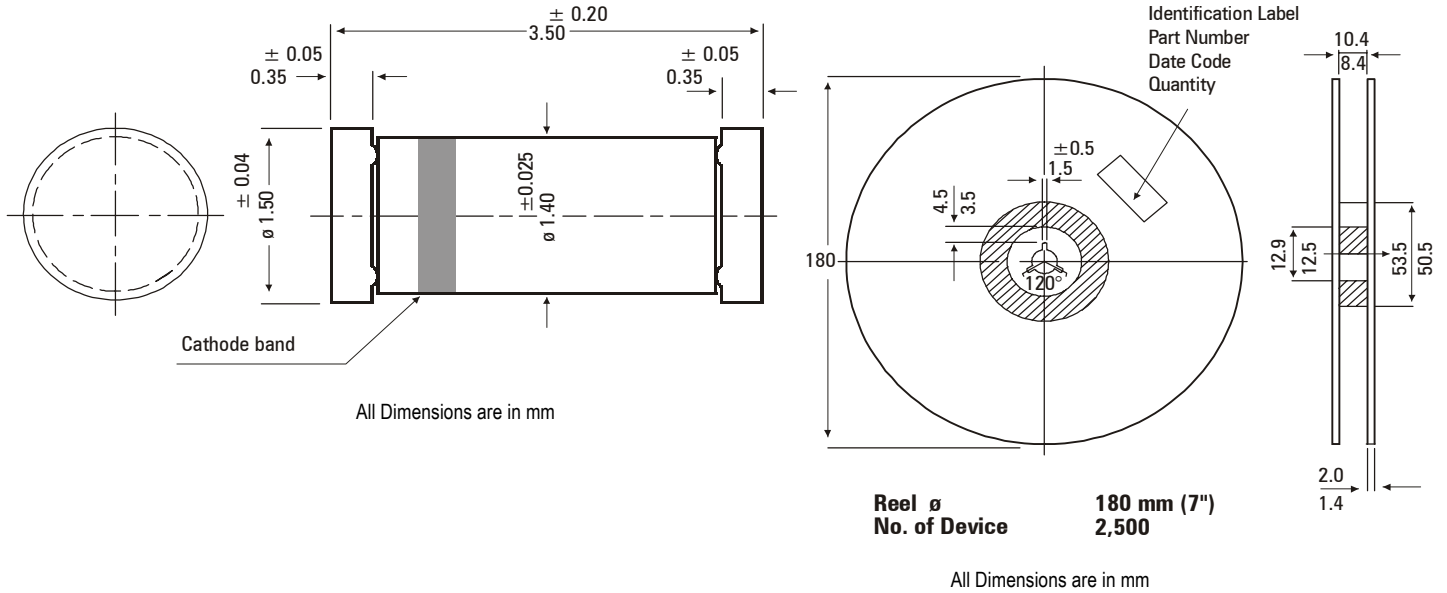
V_F=0.9V max @ 10mA

Device	Working Voltage* +/- 5% V _Z (V) @ I _{Z test} =5mA		Differential * Resistance r _{diff} (W) @ I _{Z test} =5mA max	Temperature Coefficient S _Z (mV/K) @ I _{Z test} =5mA		Differential Resistance r _{diff} (W) @ I _{Z test} =1mA max	I _R @ T _a 25°C (mA) max	V _R (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_{Z test}=2mA		@ I_{Z test}=2mA	@ I_{Z test}=2mA		@ I_{Z test}=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

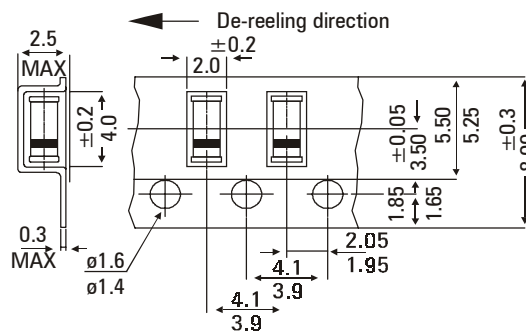
***Pulse test: 20ms ≤ tp ≤ 50ms**

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

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

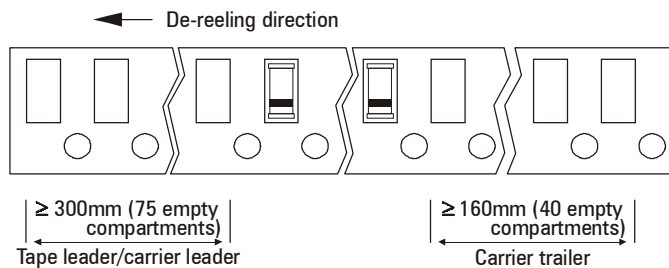


TAPE & REEL



Notes:

1. Maximum of 0.5% of the total number of components per reel may be missing-exclusively at the beginning and at the end of the reel.
2. A maximum of three consecutive components may be missing, provided this gap is followed by six consecutive components.



All Dimensions are in mm

Drawings are not to scale

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/reel	225 gm/2.5K pcs	9" x 9" x 9"	40K	18" x 12" x 10" 19" x 19" x 20"	80K 320K	7.2 kgs 28.8 kgs