

SILICON PLANAR ZENER DIODES

BZM55C 2V4 - 75V

**LS-31 (MICRO-MELF)
GLASS PACKAGE**



MAXIMUM RATINGS

DESCRIPTION	TEST CONDITIONS	SYMBOL	VALUE	UNIT
Power Dissipation	$R_{th(j-a)} \leq 300K/W$	P_D	500	mW
Junction Temperature		T_j	175	°C
Storage Temperature Range		T_{stg}	- 65 to +175	°C

THERMAL RESISTANCE

Junction to Ambient in free air	$R_{th(j-a)}$	500	K/W
Junction to tie point	$*R_{th(j-L)}$	300	K/W

*35 μ m copper clad, 0.9mm² copper area per electrode

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

Forward Voltage at $I_F=200\text{mA}$	V_F	1.5	V
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Device #	V _{ZT} **at I _{ZT}		r _{ZT} **at I _{ZT}	I _{ZT}	r _{ZK} at	I _{ZK} (mA)	I _R T _a 25°C max	at 150°C max	V _R	Temp. Coeff of Zener Voltage
	min (V)	max (V)	max (Ω)	(mA)	max (Ω)		(μA)	(V)	(%/K)	
BZM55C2V4	2.28	2.56	85	5.0	600	1.0	100	50	1.0	- 0.09 ~ - 0.06
BZM55C2V7	2.50	2.90	85	5.0	600	1.0	10	50	1.0	- 0.09 ~ - 0.06
BZM55C3V0	2.80	3.20	90	5.0	600	1.0	4.0	40	1.0	- 0.08 ~ - 0.05
BZM55C3V3	3.10	3.50	90	5.0	600	1.0	2.0	40	1.0	- 0.08 ~ - 0.05
BZM55C3V6	3.40	3.80	90	5.0	600	1.0	2.0	40	1.0	- 0.08 ~ - 0.05
BZM55C3V9	3.70	4.10	90	5.0	600	1.0	2.0	40	1.0	- 0.08 ~ - 0.05
BZM55C4V3	4.00	4.60	90	5.0	600	1.0	1.0	20	1.0	- 0.06 ~ - 0.03
BZM55C4V7	4.40	5.00	80	5.0	600	1.0	0.5	10	1.0	- 0.05 ~ + 0.02
BZM55C5V1	4.80	5.40	60	5.0	550	1.0	0.1	2.0	1.0	- 0.02 ~ + 0.02
BZM55C5V6	5.20	6.00	40	5.0	450	1.0	0.1	2.0	1.0	- 0.05 ~ + 0.05
BZM55C6V2	5.80	6.60	10	5.0	200	1.0	0.1	2.0	2.0	0.03 ~ 0.06
BZM55C6V8	6.40	7.20	8	5.0	150	1.0	0.1	2.0	3.0	0.03 ~ 0.07
BZM55C7V5	7.00	7.90	7	5.0	50	1.0	0.1	2.0	5.0	0.03 ~ 0.07
BZM55C8V2	7.70	8.70	7	5.0	50	1.0	0.1	2.0	6.2	0.03 ~ 0.08
BZM55C9V1	8.50	9.60	10	5.0	50	1.0	0.1	2.0	6.8	0.03 ~ 0.09
BZM55C10	9.40	10.60	15	5.0	70	1.0	0.1	2.0	7.5	0.03 ~ 0.10
BZM55C11	10.40	11.60	20	5.0	70	1.0	0.1	2.0	8.2	0.03 ~ 0.11
BZM55C12	11.40	12.70	20	5.0	90	1.0	0.1	2.0	9.1	0.03 ~ 0.11
BZM55C13	12.40	14.10	26	5.0	110	1.0	0.1	2.0	10	0.03 ~ 0.11
BZM55C15	13.80	15.60	30	5.0	110	1.0	0.1	2.0	11	0.03 ~ 0.11

** $t_p/T \leq 100\text{ms}$

BZM55C2V4_75V Rev061005E

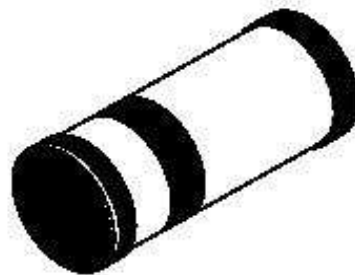
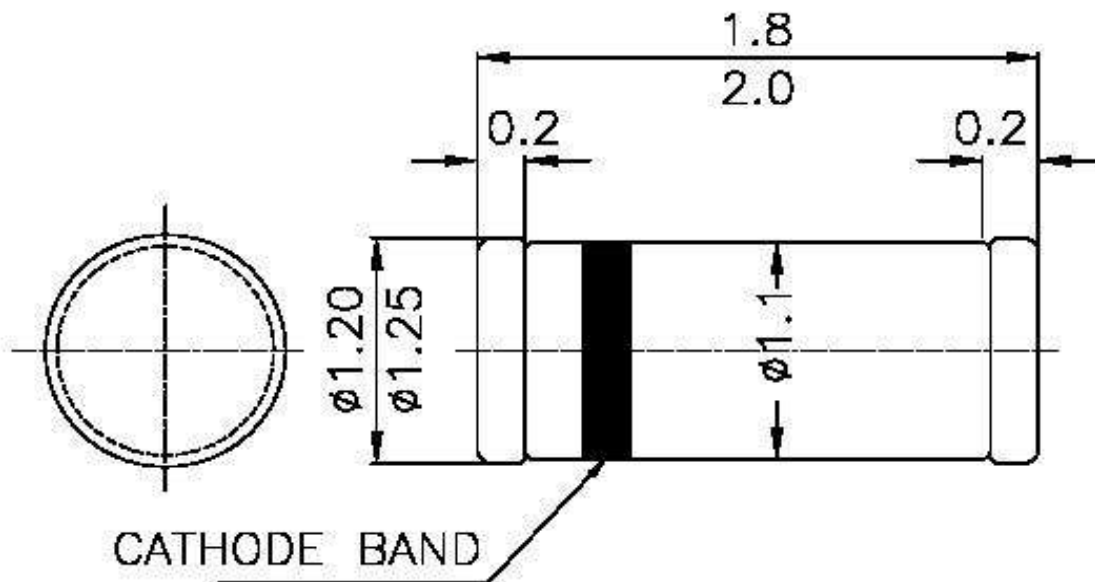
ELECTRICAL CHARACTERISTICS ($T_j=25^\circ\text{C}$ unless specified otherwise)

Forward Voltage at $I_F=200\text{mA}$	V_F	1.5	V
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Device #	V_{ZT} **at I_{ZT}		r_{ZT} **at I_{ZT}	I_{ZT}	r_{ZK} at	I_{ZK}	I_R T_a 25°C max	at 150°C max	V_R	Temp. Coeff of Zener Voltage (%/K)
	min (V)	max (V)	max (Ω)	(mA)	max (Ω)	(mA)	(μA)	(μA)	(V)	
BZM55C16	15.30	17.10	40	5.0	170	1.0	0.1	2.0	12	0.03 ~ 0.11
BZM55C18	16.80	19.10	50	5.0	170	1.0	0.1	2.0	13	0.03 ~ 0.11
BZM55C20	18.80	21.20	55	5.0	220	1.0	0.1	2.0	15	0.03 ~ 0.11
BZM55C22	20.80	23.30	55	5.0	220	1.0	0.1	2.0	16	0.04 ~ 0.12
BZM55C24	22.80	25.60	80	5.0	220	1.0	0.1	2.0	18	0.04 ~ 0.12
BZM55C27	25.10	28.90	80	5.0	220	1.0	0.1	2.0	20	0.04 ~ 0.12
BZM55C30	28.00	32.00	80	5.0	220	1.0	0.1	2.0	22	0.04 ~ 0.12
BZM55C33	31.00	35.00	80	5.0	220	1.0	0.1	2.0	24	0.04 ~ 0.12
BZM55C36	34.00	38.00	80	5.0	220	1.0	0.1	2.0	27	0.04 ~ 0.12
BZM55C39	37.00	41.00	90	2.5	500	0.5	0.1	5.0	30	0.04 ~ 0.12
BZM55C43	40.00	46.00	90	2.5	600	0.5	0.1	5.0	33	0.04 ~ 0.12
BZM55C47	44.00	50.00	110	2.5	700	0.5	0.1	5.0	36	0.04 ~ 0.12
BZM55C51	48.00	54.00	125	2.5	700	0.5	0.1	10	39	0.04 ~ 0.12
BZM55C56	52.00	60.00	135	2.5	1000	0.5	0.1	10	43	0.04 ~ 0.12
BZM55C62	58.00	66.00	150	2.5	1000	0.5	0.1	10	47	0.04 ~ 0.12
BZM55C68	64.00	72.00	200	2.5	1000	0.5	0.1	10	51	0.04 ~ 0.12
BZM55C75	70.00	79.00	250	2.5	1500	0.5	0.1	10	56	0.04 ~ 0.12

* $t_p/T \leq 100\text{ms}$

BZM55C2V4_75V Rev061005E

PACKAGE MICRO-MELF

ALL DIMENSIONS ARE IN mm

PACKING:— 2.5K / REEL(7" 178.0mm)

Disclaimer

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