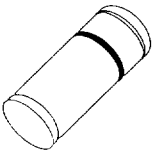
SGS-THOMSON MICROELECTRONICS

BZV 55C 2V4 → 100

ZENER DIODES

- VOLTAGE RANGE : 2.4V TO 100V



MINIMELF
(Glass)

DESCRIPTION

500mW hermetically sealed glass silicon Zener diodes.

ABSOLUTE RATINGS (limiting values)

Symbol	Parameter		Value	Unit
P_{tot}	Power Dissipation	T_{lead} = 25°C	0.5	W
I_{ZM}	Continuous Reverse Current	T_{lead} = 25°C	See page 2	mA
T_{stg} T_j	Storage and Junction Temperature Range		– 65 to 175 – 55 to 175	°C
T_L	Maximum Temperature for Soldering during 15s		260	°C

THERMAL RESISTANCE

Symbol	Parameter	Value	Unit
$R_{th\ (j-l)}$	Junction–leads	300	°C/W

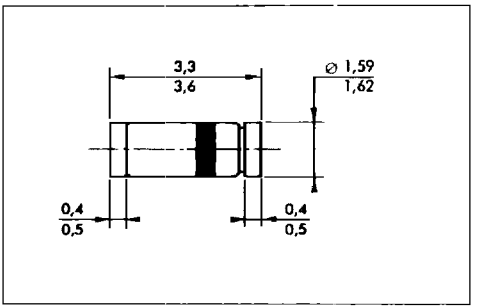
ELECTRICAL CHARACTERISTICS (T_{amb} = 25°C unless otherwise specified)

	Types	V_{ZT}/I_{ZT}* min	V_{ZT}/I_{ZT}* max	r_{ZT}/I_{ZT}* max	I_{ZT}*	r_{ZK}/I_{ZK} max		$\propto V_Z$ min	$\propto V_Z$ max	I_R/V_R T_{amb} 25°C max	I_R/V_R T_{amb} 150°C max	V_R	I_{ZM}
		(V)		(Ω)	(mA)	(Ω)	(mA)	(10^{-4}/°C)		(μA)		(V)	(mA)
	BZV 55 C 2V4	2.28	2.56	85	5	600	1	− 8	− 6	50	100	1	155
	BZV 55 C 2V7	2.5	2.9	85	5	600	1	− 8	− 6	10	50	1	135
	BZV 55 C 3V0	2.8	3.2	85	5	600	1	− 8	− 6	4	40	1	125
P	BZV 55 C 3V3	3.1	3.5	85	5	600	1	− 8	− 5	2	40	1	115
P	BZV 55 C 3V6	3.4	3.8	85	5	600	1	− 8	− 4	2	40	1	105
P	BZV 55 C 3V9	3.7	4.1	85	5	600	1	− 7	− 3	2	40	1	95
P	BZV 55 C 4V3	4.0	4.6	75	5	600	1	− 4	− 1	1	20	1	90
P	BZV 55 C 4V7	4.4	5.0	60	5	600	1	− 3	1	0.5	10	1	85
P	BZV 55 C 5V1	4.8	5.4	35	5	550	1	− 2	5	0.1	2	1	80
P	BZV 55 C 5V6	5.2	6.0	25	5	450	1	− 1	6	0.1	2	1	70
P	BZV 55 C 6V2	5.8	6.6	10	5	200	1	0	7	0.1	2	2	64
P	BZV 55 C 6V8	6.4	7.2	8	5	150	1	1	8	0.1	2	3	58
P	BZV 55 C 7V5	7.0	7.9	7	5	50	1	1	9	0.1	2	5	53
P	BZV 55 C 8V2	7.7	8.7	7	5	50	1	1	9	0.1	2	6.2	47
P	BZV 55 C 9V1	8.5	9.6	10	5	50	1	2	10	0.1	2	6.8	43
P	BZV 55 C 10	9.4	10.6	15	5	70	1	3	11	0.1	2	7.5	40
	BZV 55 C 11	10.4	11.6	20	5	70	1	3	11	0.1	2	8.2	36
P	BZV 55 C 12	11.4	12.7	20	5	90	1	3	11	0.1	2	9.1	32
	BZV 55 C 13	12.4	14.1	26	5	110	1	3	11	0.1	2	10	29
P	BZV 55 C 15	13.8	15.6	30	5	110	1	3	11	0.1	2	11	27
	BZV 55 C 16	15.3	17.1	40	5	170	1	3	11	0.1	2	12	24
	BZV 55 C 18	16.8	19.1	50	5	170	1	3	11	0.1	2	13	21
	BZV 55 C 20	18.8	21.2	55	5	220	1	3	11	0.1	2	15	20
	BZV 55 C 22	20.8	23.3	55	5	220	1	3	11	0.1	2	16	18
	BZV 55 C 24	22.8	25.6	80	5	220	1	4	12	0.1	2	18	16
	BZV 55 C 27	25.1	28.9	80	5	220	1	4	12	0.1	2	20	14
	BZV 55 C 30	28	32	80	5	220	1	4	12	0.1	2	22	13
	BZV 55 C 33	31	35	80	5	220	1	4	12	0.1	2	24	12
	BZV 55 C 36	34	38	80	5	220	1	4	12	0.1	2	27	11
	BZV 55 C 39	37	41	90	2.5	500	0.5	4	12	0.1	5	30	10
	BZV 55 C 43	40	46	90	2.5	600	0.5	4	12	0.1	5	33	9.2
	BZV 55 C 47	44	50	110	2.5	700	0.5	4	12	0.1	5	36	8.5
	BZV 55 C 51	48	54	125	2.5	700	0.5	4	12	0.1	10	39	7.8
	BZV 55 C 56	52	60	135	2.5	1000	0.5	4	12	0.1	10	43	7.0
	BZV 55 C 62	58	66	150	2.5	1000	0.5	4	12	0.1	10	47	6.4
	BZV 55 C 68	64	72	200	2.5	1000	0.5	4	12	0.1	10	51	5.9
	BZV 55 C 75	70	80	250	2.5	1500	0.5	4	12	0.1	10	56	5.3
	BZV 55 C 82	77	87	300	2.5	2000	0.5	4	12	0.1	10	62	4.8
	BZV 55 C 9*	85	96	450	1	5000	0.1	4	12	0.1	10	68	4.4
	BZV 55 C 100	94	106	450	1	5000	0.1	4	12	0.1	10	75	4.0

* Pulse test : 20ms ≤ tp ≤ 50ms δ < 2%
The regulation voltages are defined according to the E24 series.
Voltage > 100V on request.
P : Preferred voltages.
Tight tolerances available on preferred voltages : BZV 55 E : ± 3% - BZV 55 B : ± 2%.
Forward voltage drop : $V_F \leq 1.5V$ (T_{amb} = 25 C, I_F = 200mA).

PACKAGE MECHANICAL DATA

MINIMELF (Glass)



Marking : ring at cathode end.
Weight : 0.05g

FOOT PRINTER DIMENSIONS (millimeters)