BZX55C2V4 THRU BZX55C75

SILICON PLANAR ZENER DIODES

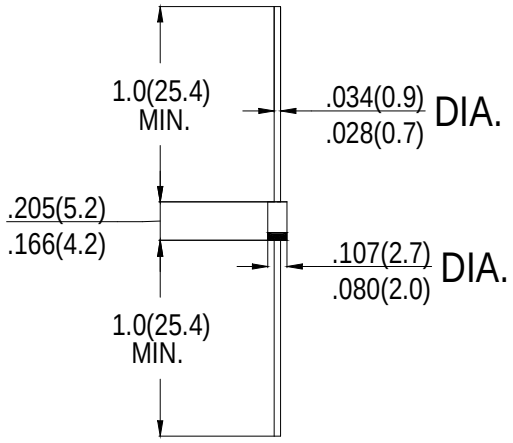
FEATURES

- Voltage Range: 2.7V to 75V
- Double siug type construction

MECHANICAL DATA

- ***Case***: Molded plastic
- ***Epoxy***: UL94V-0 rate flame retardant
- ***Lead***: MIL-STD- 202E, Method 208 guaranteed
- ***Polarity***:Color band denotes cathode end
- ***Mounting position***: Any
- ***Weight***: 0.33 grams

DO-41



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRONICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz,resistive or inductive load.
For capacitive load, derate current by 20%.

Absolute Maximum Ratings（T_a=25℃）

	SYMBOL	VALUE	units
Zener Current see Table “Characterstics”			
Power Dissipation at T_{amb}=25°C	P_{tot}	0.5[1)]	W
Junction Temperature	T_J	150	°C
[1)] Valid provided that leads at a distance of 8 mm form case are kept at ambient temperature.			

Characteristics at T_{amb}=25℃

	SYMBOL	Min.	Typ.	Max.	units
Forward Voltage at I_F=250mA	V_F	--	--	1.2	V
Valid provided that leads at a distance of 8 mm form case are kept at ambient temperature.					

SILICON PLANAR POWER ZENER DIODES

TYPE	Zener Voltage range[1]				Dynamic recsistance			Reverse leakage current		Max. Zener Current
	V_{znom}	I_{ZT} for V_{ZT}			r_{ZJT}[3]	I_{ZM} @ T_A		I_R[2] at V_R		I_{ZM} @ T_A[4]
	V	mA	V[2]		mA	Ω	mA	μA	V	mA
BZX55C2V4	2.4	5	2.28	2.56	85	600	1	50	1	155
BZX55C2V7	2.7	5	2.5	2.9	85	600	1	10	1	135
BZX55C3V0	3.0	5	2.8	3.2	85	600	1	4	1	125
BZX55C3V3	3.3	5	3.1	3.5	85	600	1	2	1	115
BZX55C3V6	3.6	5	3.4	3.8	85	600	1	2	1	105
BZX55C3V9	3.9	5	3.7	4.1	85	600	1	2	1	95
BZX55C4V3	4.3	5	4.0	4.6	75	600	1	1.0	1	90
BZX55C4V7	4.7	5	4.4	5.0	60	600	1	0.5	1	85
BZX55C5V1	5.1	5	4.8	5.4	35	550	1	0.1	1	80
BZX55C5V6	5.6	5	5.2	6.0	25	450	1	0.1	1	70
BZX55C6V2	6.2	5	5.8	6.6	10	200	1	0.1	2	64
BZX55C6V8	6.8	5	6.4	7.2	8.0	150	1	0.1	3	58
BZX55C7V5	7.5	5	7.0	7.9	7.0	50	1	0.1	5	53
BZX55C8V2	8.2	5	7.7	8.7	7.0	50	1	0.1	6.2	47
BZX55C9V1	9.1	5	8.5	9.6	10	50	1	0.1	6.8	43
BZX55C10	10	5	9.4	10.6	15	70	1	0.1	7.5	40
BZX55C11	11	5	10.4	11.6	20	70	1	0.1	8.2	36
BZX55C12	12	5	11.4	12.7	20	90	1	0.1	9.1	32
BZX55C13	13	5	12.4	14.1	26	110	1	0.1	10	29
BZX55C15	15	5	13.8	15.6	30	110	1	0.1	11	27
BZX55C16	16	5	15.3	17.1	40	170	1	0.1	12	24
BZX55C18	18	5	16.8	19.1	50	170	1	0.1	13	21
BZX55C20	20	5	18.8	21.2	55	220	1	0.1	15	20
BZX55C22	22	5	20.8	23.3	55	220	1	0.1	16	18
BZX55C24	24	5	22.8	25.6	80	220	1	0.1	18	16
BZX55C27	27	5	25.1	28.9	80	220	1	0.1	20	14
BZX55C30	30	5	28	32	80	220	1	0.1	22	13
BZX55C33	33	5	31	35	80	220	1	0.1	24	12
BZX55C36	36	5	34	38	80	220	1	0.1	27	11
BZX55C39	39	2.5	37	41	90	500	0.5	0.1	30	10
BZX55C43	43	2.5	40	46	90	600	0.5	0.1	33	9.2
BZX55C47	47	2.5	44	50	110	700	0.5	0.1	36	8.5
BZX55C51	51	2.5	48	54	125	700	0.5	0.1	39	7.8
BZX55C56	56	2.5	52	60	135	1000	0.5	0.1	43	7
BZX55C62	62	2.5	58	66	150	1000	0.5	0.1	47	6.4
BZX55C68	68	2.5	64	72	200	1000	0.5	0.1	51	5.9
BZX55C75	75	2.5	70	79	250	1500	0.5	0.1	56	5.3

[1] Tested with pulses tp=20 ms.

[2] Tolerance designation — The type numbers listed have zener voltage min/max limits as shown. Device tolerance of ±2% are indicated by a “B” instead of a “C”. Zener voltage is measured with the device junction in thermal equilibrium at the lead temperature of 30°C ±1°C and 3/8, lead length.

[3] ZZT and ZZK are measured by dividing the ac voltage drop across the device by the ac current applied. The specified limtis are for IZ(ac) = 0.1 IZ(dc) with the ac frequency = 1.0 kHz.

[4] This data was calculated using nominal voltages. The maximum current handling capability on a worst case basis is limited by the actual zener voltage at the operating point and the power derating curve.