

TM

# BZT55C2V0 THRU BZT55C75

**500 mW  
Zener Diode  
2.0 to 75 Volts**

## Features

- Small surface mounting type
- High reliability

## Absolute Maximum Ratings

Symbol	Rating	Rating	Unit
$P_D$	Power dissipation	500	mW
$I_Z$	Z-current	$P_V/V_Z$	mA
$T_J$	Junction Temperature	-55 to +150	°C
$T_{STG}$	Storage Temperature Range	-55 to +150	°C

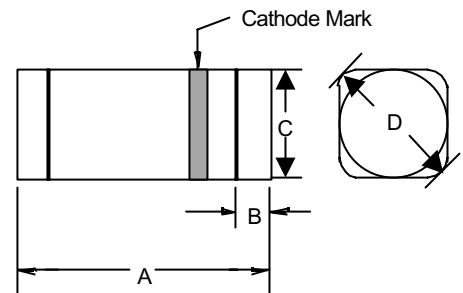
## Maximum Thermal Resistance

Symbol	Rating	Rating	Unit
$R_{thJA}$	Junction Ambient	500	K/W

## Electrical Characteristics

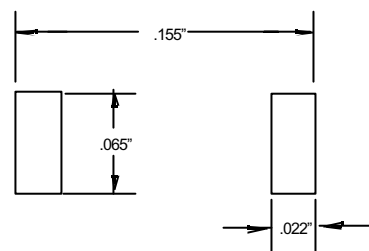
Symbol	Rating	Rating	Unit
$V_F$	Maximum Forward Voltage ( $I_F=200mA_{dc}$ )	1.5	V

### Quadro MELF



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.130	.146	3.30	3.70	
B	.008	.016	.20	.40	
C	.055	.063	1.40	1.60	∅
D	.067		1.70		

### SUGGESTED SOLDER PAD LAYOUT



## BZT55C2V0 thru BZT55C75

**ELECTRICAL CHARACTERISTICS @25°C**

Type	V <sub>Z</sub> VOLTS	I <sub>ZT</sub> for V <sub>ZT</sub> and		r <sub>ZT</sub>	r <sub>ZK</sub> at I <sub>ZK</sub>		REVERSE CURRENT I <sub>R</sub> (Max) @ V <sub>R</sub>			TK <sub>VZ</sub>
	Nom	mA	V <sup>(1)</sup>	Ω	Ω	mA (Max)	uA	uA <sup>(2)</sup>	V	%/K
BZT55C2V0	2.0	5.0	1.9-2.1	100	600	1.0	<150	<300	1.0	-0.09 to -0.06
BZT55C2V2	2.2	5.0	2.09-2.31	100	600	1.0	<150	<300	1.0	-0.09 to -0.06
BZT55C2V4	2.4	5.0	2.28-2.56	<85	600	1.0	<50	<100	1.0	-0.09 to -0.06
BZT55C2V7	2.7	5.0	2.5-2.9	<85	600	1.0	<10	<50	1.0	-0.09 to -0.06
BZT55C3V0	3.0	5.0	2.8-3.2	<85	600	1.0	<4.0	<40	1.0	-0.08 to -0.05
BZT55C3V3	3.3	5.0	3.1-3.5	<85	600	1.0	<2.0	<40	1.0	-0.08 to -0.05
BZT55C3V6	3.6	5.0	3.4-3.8	<85	600	1.0	<2.0	<40	1.0	-0.08 to -0.05
BZT55C3V9	3.9	5.0	3.7-4.1	<85	600	1.0	<2.0	<40	1.0	-0.08 to -0.05
BZT55C4V3	4.3	5.0	4.0-4.6	<75	600	1.0	<1.0	<20	1.0	-0.06 to -0.03
BZT55C4V7	4.7	5.0	4.4-5.0	<60	600	1.0	<0.5	<10	1.0	-0.05 to +0.02
BZT55C5V1	5.1	5.0	4.8-5.4	<35	550	1.0	<0.1	<2.0	1.0	-0.02 to +0.02
BZT55C5V6	5.6	5.0	5.2-6.0	<25	450	1.0	<0.1	<2.0	1.0	-0.05 to +0.05
BZT55C6V2	6.2	5.0	5.8-6.6	<10	200	1.0	<0.1	<2.0	2.0	0.03 to 0.06
BZT55C6V8	6.8	5.0	6.4-7.2	<8	150	1.0	<0.1	<2.0	3.0	0.03 to 0.07
BZT55C7V5	7.5	5.0	7.0-7.9	<7	50	1.0	<0.1	<2.0	5.0	0.03 to 0.07
BZT55C8V2	8.2	5.0	7.7-8.7	<7	50	1.0	<0.1	<2.0	6.2	0.03 to 0.08
BZT55C9V1	9.1	5.0	8.5-9.6	<10	50	1.0	<0.1	<2.0	6.8	0.03 to 0.09
BZT55C10	10	5.0	9.4-10.6	<15	70	1.0	<0.1	<2.0	7.5	0.03 to 0.1
BZT55C11	11	5.0	10.4-11.6	<20	70	1.0	<0.1	<2.0	8.2	0.03 to 0.11
BZT55C12	12	5.0	11.4-12.7	<20	90	1.0	<0.1	<2.0	9.1	0.03 to 0.11
BZT55C13	13	5.0	12.4-14.1	<26	110	1.0	<0.1	<2.0	10	0.03 to 0.11
BZT55C15	15	5.0	13.8-15.6	<30	110	1.0	<0.1	<2.0	11	0.03 to 0.11
BZT55C16	16	5.0	15.3-17.1	<40	170	1.0	<0.1	<2.0	12	0.03 to 0.11
BZT55C18	18	5.0	16.8-19.1	<50	170	1.0	<0.1	<2.0	13	0.03 to 0.11
BZT55C20	20	5.0	18.8-21.2	<55	220	1.0	<0.1	<2.0	15	0.03 to 0.11
BZT55C22	22	5.0	20.8-23.3	<55	220	1.0	<0.1	<2.0	16	0.04 to 0.12
BZT55C24	24	5.0	22.8-25.6	<80	220	1.0	<0.1	<2.0	18	0.04 to 0.12
BZT55C27	27	5.0	25.1-28.9	<80	220	1.0	<0.1	<2.0	20	0.04 to 0.12
BZT55C30	30	5.0	28-32	<80	220	1.0	<0.1	<2.0	22	0.04 to 0.12
BZT55C33	33	5.0	31-35	<80	220	1.0	<0.1	<2.0	24	0.04 to 0.12
BZT55C36	36	5.0	34-38	<80	220	1.0	<0.1	<2.0	27	0.04 to 0.12
BZT55C39	39	2.5	37-41	<90	500	0.5	<0.1	<5.0	30	0.04 to 0.12
BZT55C43	43	2.5	40-46	<90	600	0.5	<0.1	<5.0	33	0.04 to 0.12
BZT55C47	47	2.5	44-50	<110	700	0.5	<0.1	<5.0	36	0.04 to 0.12
BZT55C51	51	2.5	48-54	<125	700	0.5	<0.1	<10	39	0.04 to 0.12
BZT55C56	56	2.5	52-60	<135	1000	0.5	<0.1	<10	43	0.04 to 0.12
BZT55C62	62	2.5	58-66	<150	1000	0.5	<0.1	<10	47	0.04 to 0.12
BZT55C68	68	2.5	64-72	<200	1000	0.5	<0.1	<10	51	0.04 to 0.12
BZT55C75	75	2.5	70-79	<250	1500	0.5	<0.1	<10	56	0.04 to 0.12

(1) Tighter tolerances available on request: BZT55B...±2% of V<sub>Znom</sub>(2) at T<sub>J</sub>=150°C

**Ordering Information**

Device	Packing
(Part Number)-TP	Tape&Reel;2.5Kpcs/Reel