BZX55C(A)(B)(D)2V4M THRU BZX55C(A)(B)(D)47M

ZENER DIODES

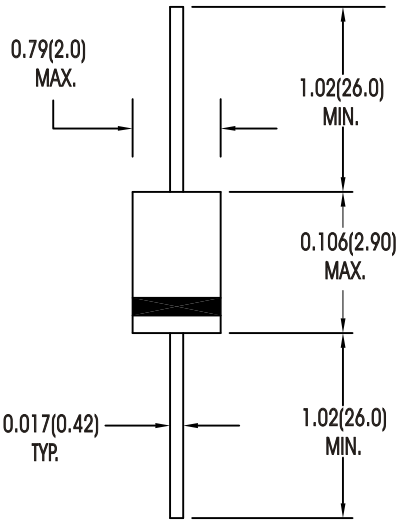
FEATURES:

- Standard Zener voltage tolerance is ±5% AND
  SUFFIX "BZX55A" FOR ±1%
  SUFFIX "BZX55B" FOR ±2%
  SUFFIX "BZX55C" FOR ±5%
  SUFFIX "BZX55D" FOR ±20%
- These diodes are also available in DO-34 case with the type designation BZX55C(A)(B)(D)2V4M..... BZX55C(A)(B)(D)47M

MECHANICAL DATA

Case: AIXAL Molded Glass

DO-34



Dimensions in inches and (millimeters)

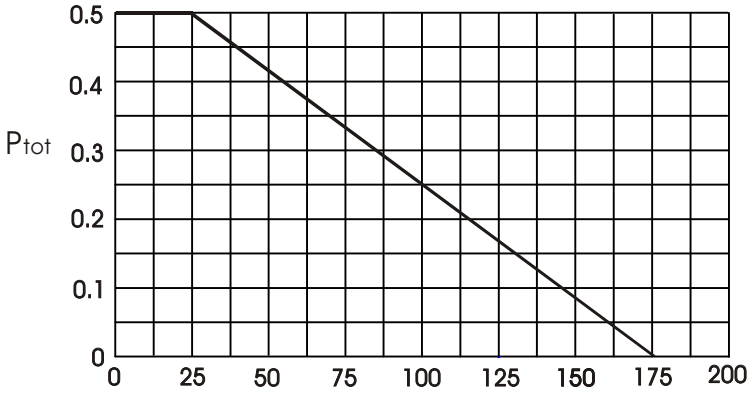
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25° C ambient temp. unless otherwise specified.
Single phase, half sine wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20 %.

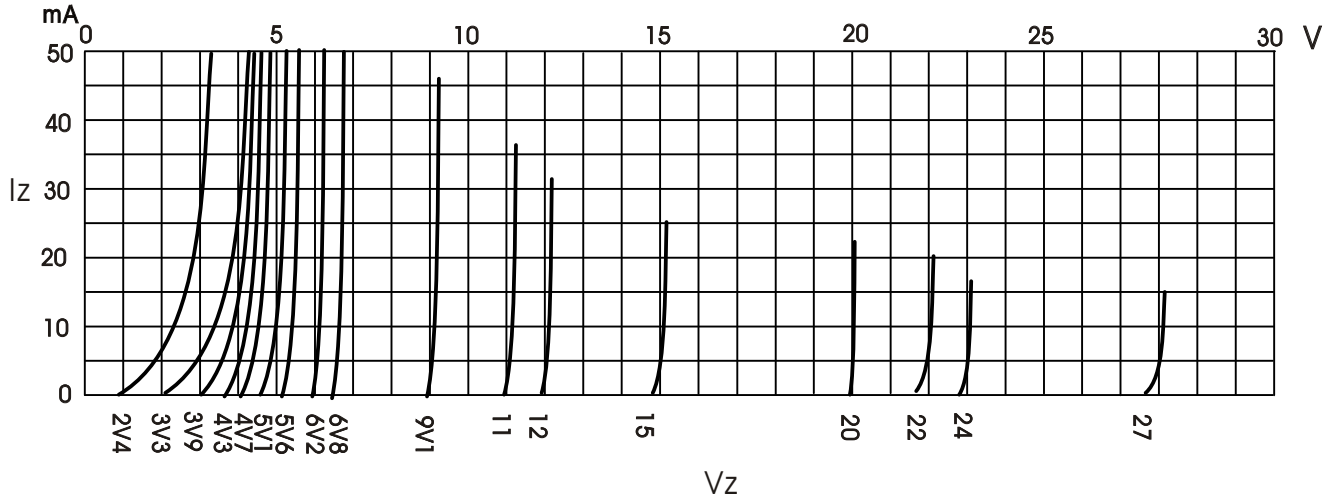
Characteristic	Symbol	Value	Units
Power Dissipation at Tamb=25 ℃	Ptot	0.5[1)]	W
Z-current	Iz	Pv/Vz	mA
Tremal Resistance Junction to Ambient Air	RthJ-A	0.3[2)]	K/W
Maximum instantaneous forward voltage drop at IF=100 mADC	V_F	1.0	Volts
Junction temperature	T_J	175	℃
Storage temperature range	Tstg	-65 to+175	℃

1) Valid provided that leads are kept at ambient temperature at adistance of 8mm from case
2) Valid provided that leads at distance of 10mm from case are kept ar ambient temperature

CHANGE IN THE POWER DISSIPATION DUE TO THE AMBIENT TEMPERATURE



BREAKDOWN CHARACTERISTICS



ZENER DIODES BZX55C(A)(B)(D)2V4M THRU BZX55C(A)(B)(D)47M

Device Type	Nominal Zener Voltage Vz at Izt	Test Current IzT	Maximum Zener Impedance			Maximum Reverse Leakage Current		Typical Temperature coefficient	Maximum Regulator Current IzM
			ZzT at IzT	ZzK at IzK	IzK	IR	Test Voltage Suffix B		
	Volts	mA	Ω	Ω	mA	μA	Volts	%/℃	mA
BZX55C2V4M	2.28-2.56	5	85	600	1.0	50	1.0	-0.070	150
BZX55C2V7M	2.5-2.9	5	85	600	1.0	10	1.0	-0.070	135
BZX55C3V0M	2.8-3.2	5	85	600	1.0	4	1.0	-0.070	125
BZX55C3V3M	3.1-3.5	5	85	600	1.0	2	1.0	-0.065	115
BZX55C3V6M	3.4-3.8	5	85	600	1.0	2	1.0	-0.060	105
BZX55C3V9M	3.7-4.1	5	85	600	1.0	2	1.0	-0.050	95
BZX55C4V3M	4.0-4.6	5	75	600	1.0	1	1.0	-0.025	90
BZX55C4V7M	4.4-5.0	5	60	600	1.0	0.5	1.0	-0.010	85
BZX55C5V1M	4.8-5.4	5	35	550	1.0	0.1	1.0	-0.015	80
BZX55C5V6M	5.2-6.0	5	25	450	1.0	0.1	1.0	-0.025	70
BZX55C6V2M	5.8-6.6	5	10	200	1.0	0.1	2.0	+0.035	64
BZX55C6V8M	6.4-7.2	5	8	150	1.0	0.1	3.0	+0.045	58
BZX55C7V5M	7.0-7.9	5	7	50	1.0	0.1	5.0	+0.050	53
BZX55C8V2M	7.7-8.7	5	7	50	1.0	0.1	6.0	+0.050	47
BZX55C9V1M	8.5-9.6	5	10	50	1.0	0.1	7.0	+0.060	43
BZX55C10M	9.4-10.6	5	15	70	1.0	0.1	7.5	+0.070	40
BZX55C11M	10.4-11.6	5	20	70	1.0	0.1	8.5	+0.070	36
BZX55C12M	11.4-12.7	5	20	90	1.0	0.1	9.0	+0.070	32
BZX55C13M	12.4-14.1	5	26	110	1.0	0.1	10	+0.070	29
BZX55C15M	13.8-15.6	5	30	110	1.0	0.1	11	+0.070	27
BZX55C16M	15.3-17.1	5	40	170	1.0	0.1	12	+0.070	24
BZX55C18M	16.8-19.1	5	50	170	1.0	0.1	14	+0.070	21
BZX55C20M	18.8-21.2	5	55	220	1.0	0.1	15	+0.070	20
BZX55C22M	20.8-23.3	5	55	220	1.0	0.1	17	+0.070	18
BZX55C24M	22.8-25.6	5	80	220	1.0	0.1	18	+0.080	16
BZX55C27M	25.1-28.9	5	80	220	1.0	0.1	20	+0.080	14
BZX55C30M	28-32	5	80	220	1.0	0.1	22	+0.080	13
BZX55C33M	31-35	5	80	220	1.0	0.1	24	+0.080	12
BZX55C36M	34-38	5	80	220	1.0	0.1	27	+0.080	11
BZX55C39M	37-41	2.5	90	500	1.0	0.1	30	+0.080	10
BZX55C43M	40-46	2.5	90	600	1.0	0.1	33	+0.080	9.2
BZX55C47M	44-50	2.5	110	700	1.0	0.1	36	+0.080	8.5

1) STANDARD VOLTAGE TOLERANCE IS ±5% AND
SUFFIX "BZX55A" FOR ± 1%
SUFFIX "BZX55B"X FOR ±2%
SUFFIX "BZX55C" FOR ±5%
SUFFIX "BZX55D" FOR ±20%

ZENER DIODE MARKING SYSTEM

$\frac{\text{BZX}}{1*}$ $\frac{\text{C3V6}}{2*}$

1* Type NO

2* Vz of zener diode, V code is instead of decimal point. E.g., 3V6=3.6V