ZENER DIODES

BZX55C-SERIES

Device Type	Nominal zener Voltage Vz at Izt*	Test Current IzT	Maximum Zener Impedance		Typical Temperature coefficient	Maximum Reverse Leakage Current		Maximum Regulator Current IzM
			ZzT at IzT	Zzk at Izk=1mA		IR	Test-Voltage suffix B	
	Volts	mA	Ω	Ω	%/ ℃	μA	Volts	mA
BZX55-C2V2	2.09-2.31	5	85	600	-0.070	50	1.0	165
BZX55-C2V4	2.28-2.56	5	85	600	-0.070	50	1.0	150
BZX55-C2V7	2.5-2.9	5	85	600	-0.070	10	1.0	135
BZX55-C3V0	2.8-3.2	5	85	600	-0.070	4	1.0	125
BZX55-C3V3	3.1-3.5	5	85	600	-0.065	2	1.0	115
BZX55-C3V6	3.4-3.8	5	85	600	-0.060	2	1.0	105
BZX55-C3V9	3.7-4.1	5	85	600	-0.050	2	1.0	95
BZX55-C4V3	4.0-4.6	5	75	600	-0.025	1	1.0	90
BZX55-C4V7	4.4-5.0	5	60	600	-0.010	0.5	1.0	85
BZX55-C5V1	4.8-5.4	5	35	550	+0.015	0.1	1.0	80
BZX55-C5V6	5.2-6.0	5	25	450	+0.025	0.1	1.0	70
BZX55-C6V2	5.8-6.6	5	10	200	+0.035	0.1	2.0	64
BZX55-C6V8	6.4-7.2	5	8	150	+0.045	0.1	3.0	58
BZX55-C7V5	7.0-7.9	5	7	50	+0.050	0.1	5.0	53
BZX55-C8V2	7.7-8.7	5	7	50	+0.050	0.1	6.0	47
BZX55-C9V1	8.5-9.6	5	10	50	+0.060	0.1	7.0	43
BZX55-C10	9.4-10.6	5	15	70	+0.070	0.1	7.5	40
BZX55-C11	10.4-11.6	5	20	70	+0.070	0.1	8.5	36
BZX55-C12	11.4-12.7	5	20	90	+0.070	0.1	9.0	32
BZX55-C13	12.4-14.1	5	26	110	+0.070	0.1	10	29
BZX55-C15	13.8-15.6	5	30	110	+0.070	0.1	11	27
BZX55-C16	15.3-17.1	5	40	170	+0.070	0.1	12	24
BZX55-C18	16.8-19.1	5	50	170	+0.070	0.1	14	21
BZX55-C20	18.8-21.2	5	55	220	+0.070	0.1	15	20
BZX55-C22	20.8-23.3	5	55	220	+0.070	0.1	17	18
BZX55-C24	22.8-25.6	5	80	220	+0.080	0.1	18	16
BZX55-C27	25.1-28.9	5	80	220	+0.080	0.1	20	14
BZX55-C30	28-32	5	80	220	+0.080	0.1	22	13
BZX55-C33	31-35	5	80	220	+0.080	0.1	24	12
BZX55-C36	34-38	5	80	220	+0.080	0.1	27	11
BZX55-C39	37-41	2.5	90	500	+0.080	0.1	30	10
BZX55-C43	40-46	2.5	90	600	+0.080	0.1	33	9.2
BZX55-C47	44-50	2.5	110	700	+0.080	0.1	36	8.5
BZX55-C51	48-54	2.5	125	700	+0.080	0.1	39	7.5

STANDARD VOLTAGE TOLERANCE IS ±5% AND:
SUFFIX "A" FOR ±1%
SUFFIX "B" FOR ±2%
SUFFIX "C" FOR ±5%
SUFFIX "D" FOR ±20%

ZENER DIODE MARKING SYSTEM:

DO-34

Z	3V9
1*	2*

DO-35

BZX55	C3V9
1*	2*

1* Type NO.
2* Vz of zener diode, V code is instead of decimal point. e.g., 3V6=3.6V
#Measured with pulses Tp=20m Sec.

ZENER DIODES

BZX55C-SERIES

Absolute Maximum Ratings

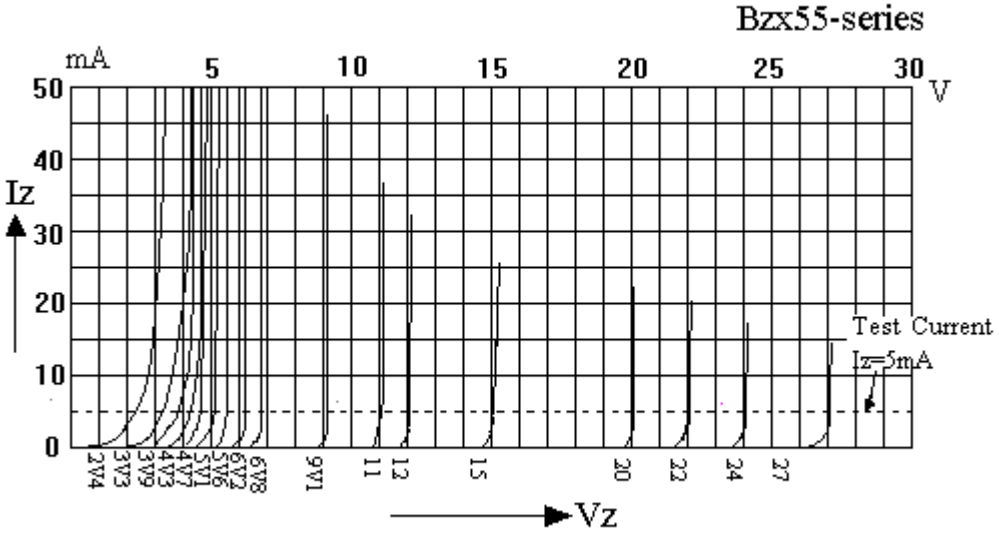
	Symbol	Value	Unit
Zener Current see Table "Characteristics"			
Power Dissipation at Tamb=25℃	Ptot	500*	mW
Junction Temperature	Tj	175	℃
Storage Temperature Range	Ts	-65 to +175	℃
*Valid provided that leads are kept at ambient temperature at a distance of 8mm from case.			

Cases: DO-34,DO-35 Molded Glass

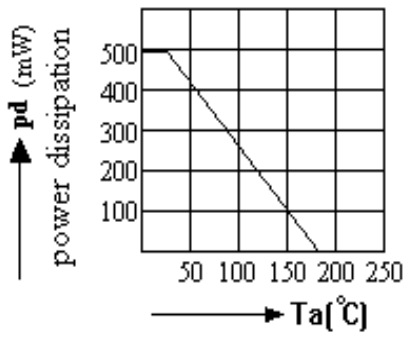
Characteristic at Tamb=25℃

	Symbol	Min.	Typ.	Max.	Unit
Thermal Resistance Junction to Ambient Air	RthA	–	–	0.3*	K/mW
Forward Voltage at IF=100mA	VF	–	–	1	V
*Valid provided that leads at a distance of 10mm from case are kept at ambient temperature.					

Breakdown characteristics



changes in the power dissipation due to the ambient temperature.



Ambient Temperature.