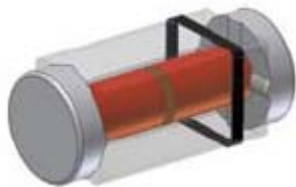


BZT55C- Series



Features:

- Zener voltage range 2.0 to 75 volts.
- Mini-MELF package.
- Surface device type mounting.
- Hermetically sealed glass.
- Compression Bonded Construction.
- All external surfaces are corrosion resistant and terminals are readily solderable.
- RoHS compliant.
- Matte Tin (Sn) lead finish.
- Blue color band indicates negative polarity.

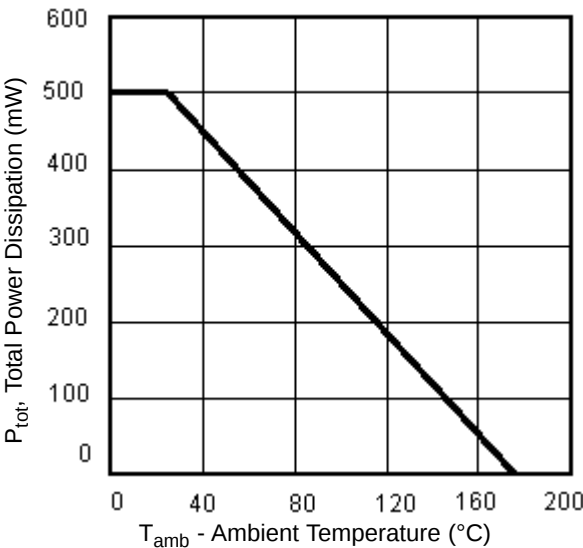
Maximum Ratings and Electrical Characteristics

Type Number	Symbol	Value	Units
Power Dissipation	P_D	500	mW
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to + 200	$^{\circ}\text{C}$

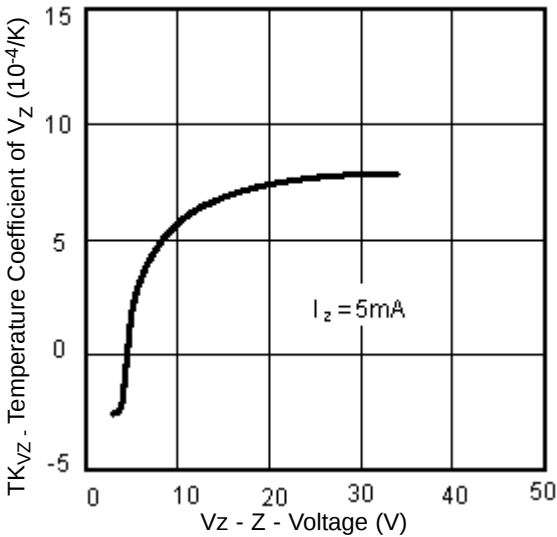
Notes : These ratings are limiting values above which the serviceability of the diode may be impaired.

Ratings and Characteristic Curves

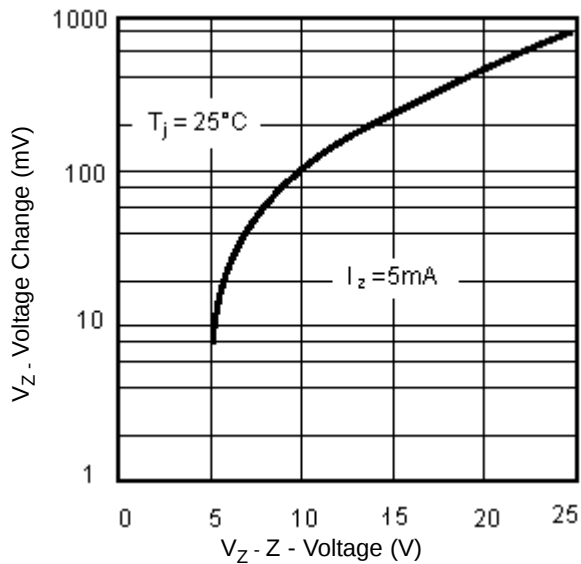
Total Power Dissipation vs. Ambient Temperature



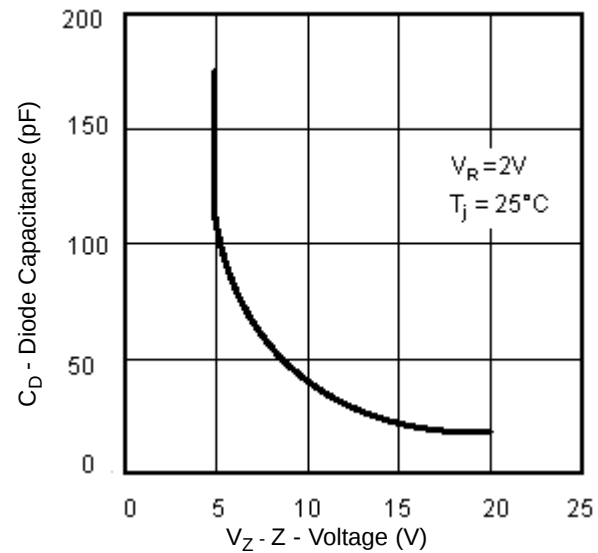
Temperature Coefficient of V_Z vs. Z-Voltage



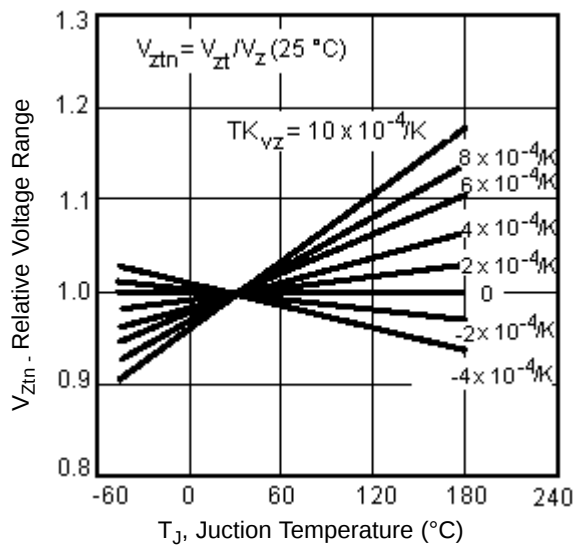
Typical Change of Working Voltage under Operating Conditions at $T_{amb} = 25^{\circ}\text{C}$



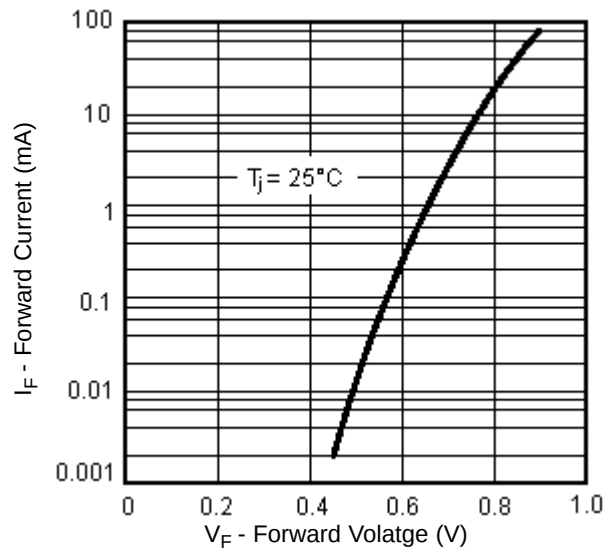
Diode Capacitance vs. Z - Voltage



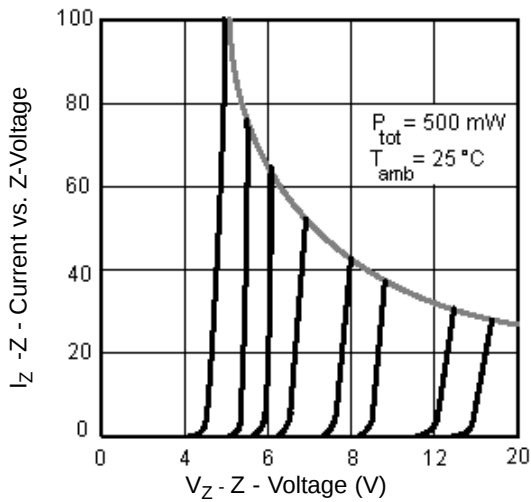
Typical Change of Working Voltage vs. Junction Temperature



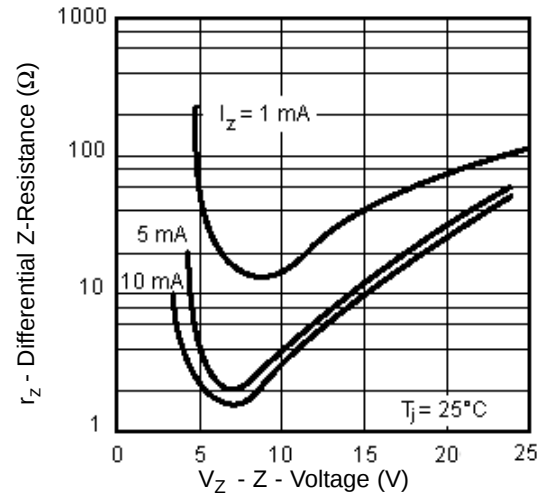
Forward Current vs. Forward Voltage



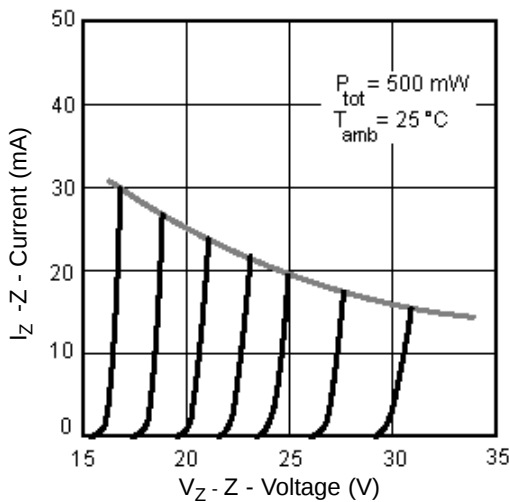
Z-Current vs. Z-Voltage



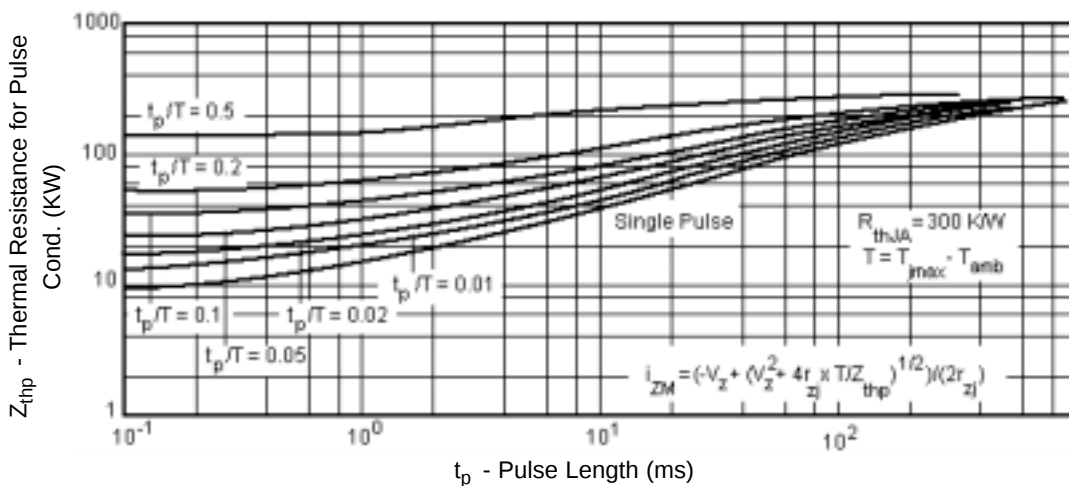
Differential Z - Resistance vs. Z-Voltage



Z-Current vs. Z-Voltage



Thermal Response



Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

V _Z at I _{ZT} (Volts)		I _{ZT} mA	Z _{ZT} at I _{ZT} Ohms Maximum	I _{ZK} mA	Z _{ZK} at I _{ZK} Ohms	I _R at V _R uA Maximum	V _R V	Part Number			
V _Z Minimum (V)	V _Z Maximum (V)										
9.4	10.6	5	15	1.0	70	0.1	7.5	BZT55C10			
10.4	11.6		20				8.2	BZT55C11			
11.4	12.7				90		9.1	BZT55C12			
12.4	14.1		26		110		10	BZT55C13			
13.8	15.6		30				11	BZT55C15			
15.3	17.1		40		170		12	BZT55C16			
16.8	19.1		50				13	BZT55C18			
18.8	21.1		55		220		15	BZT55C20			
20.8	23.3						16	BZT55C22			
22.8	25.6		80				18	BZT55C24			
25.1	28.9	2		20		BZT55C27					
1.88	2.11	5	100	600	50	1.0	BZT55C2V0				
2.08	2.33						BZT55C2V2				
2.28	2.56		85		10		BZT55C2V4				
2.51	2.89				BZT55C2V7						
28	32	2	80	220	0.1	22	BZT55C30				
31	35					24	BZT55C33				
34	38		90			0.5	500	27	BZT55C36		
37	41							28	BZT55C39		
2.8	3.2	5	85	1.0	600	4	1.0	BZT55C3V0			
3.1	3.5					2		0.5	700	0.1	BZT55C3V3
3.4	3.8										BZT55C3V6
3.7	4.1										BZT55C3V9
40	46	2	90	1.0	600	2	1.0		BZT55C43		
44	50		110					700	BZT55C47		
4.0	4.6	5	75	1.0	600	2	1.0	BZT55C4V3			
4.4	5.0		60			0.5		BZT55C4V7			
48	54	2	125	0.5	700	0.1	38	BZT55C51			
52	60		135		1000		42	BZT55C56			
4.8	5.4	5	35	1.0	550		1.0	BZT55C5V1			
5.2	6.0		25		450			BZT55C5V6			
58	66	2.5	150	0.5	1000			47	BZT55C62		

Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

V _Z at I _{ZT} (Volts)		I _{ZT} mA	Z _{ZT} at I _{ZT} Ohms Maximum	I _{ZK} mA	Z _{ZK} at I _{ZK} Ohms	I _R at V _R uA Maximum	V _R V	Part Number
V _Z Minimum (V)	V _Z Maximum (V)							
64	72	2.5	160	0.5	1000	0.1	51	BZT55C68
5.8	6.6	5	10	1.0	200		2.0	BZT55C6V2
6.4	7.2		8		150		3.0	BZT55C6V8
70	80	2.5	170	0.5	1000		56	BZT55C75
7.0	7.9	5	7	1.0	50		5.0	BZT55C7V5
7.7	8.7						6.2	BZT55C8V2
8.5	9.6		10				6.8	BZT55C9V1

V_F Forward Voltage = 1.0v Maximum at $I_F = 100\text{mA}$ for all types.

- Notes :
1. The type numbers listed have zener voltage min/max limits as shown.
 2. The zener impedance is derived from the 60-cycle ac voltage, which results when an ac current having an rms value equal to 10% of the dc zener current (I_{ZT} or I_{ZK}) is superimposed to I_{ZT} or I_{ZK} .

BZT55C- Series



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