



BZY88C5V1 BZY88C33V

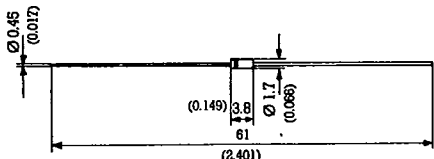
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98D 00193

D

0.5 W Zener Diodes

T-11-11

<p>Dimensions in mm. (inches)</p> <p>DO-35 (Glass)</p> 	<p>Voltage 5.1 to 33 V.</p> <p>Power 0.5 W</p>
<p>Mounting instructions</p> <ol style="list-style-type: none"> 1. Min. distance from body to soldering point, 2 mm. 2. Max. solder temperature, 300°C. 3. Max. soldering time, 3 sec. 4. Do not bend lead at a point closer than 1,5 mm. to the body. 	<p>Standard Voltage Tolerance is $\pm 5\%$</p> <ul style="list-style-type: none"> • Low cost • DO-35 Glass case • Terminals: Axial Leads • Polarity: Color band denotes cathode

Maximum Ratings, according to IEC publication No. 134

P_{tot}	Power dissipation at $T_{amb} = 25^{\circ}\text{C}$	500 mW
P_{ZSM}	Non repetitive peak zener dissipation ($T_j = 25^{\circ}\text{C}$, $t = 1\text{ ms}$)	12 W
T_j	Max. operating temperature	175°C
T_{stg}	Storage temperature range	- 50°C to + 175°C

Electrical Characteristics at $T_{amb} = 25^{\circ}\text{C}$

V_F	Max. forward voltage drop at $I_F = 200\text{ mA}$	1,2 V
R_{thj-a}	Max. thermal resistance at: 8 mm. lead length	0,30°C/mW



BZY88

T-11-11

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Type	Zener Voltage Range at $I_z = 5\text{mA}$ V_z	Maximum Zener Impedance		Typical Temperature Coefficient (mV/°C)	Maximum Reverse Leakage Current	
		Z_{zt} (Ω)	I_z (mA)		I_r (μA)	at V_r (V)
BZY88-C5V1	4.8-5.4	75	5	- 1.2	1	2
BZY88-C5V6	5.2-6.0	55	5	- 0.2	1	2
BZY88-C6V2	5.8-6.6	27	5	+ 2	1	2
BZY88-C6V8	6.4-7.2	15	5	+ 3.2	1	3
BZY88-C7V5	7.0-7.9	15	5	+ 4.2	0.5	3
BZY88-C8V2	7.7-8.7	20	5	+ 5	0.4	3
BZY88-C9V1	8.6-9.6	25	5	+ 6	0.4	5
BZY88-C10	9.4-10.6	25	5	+ 7	2.5	7
BZY88-C11	10.4-11.6	35	5	+ 8.7	2.5	7
BZY88-C12	11.4-12.7	35	5	+ 9	2.5	8
BZY88-C13	12.4-14.1	35	5	+ 10.4	2.5	9
BZY88-C15	13.8-15.6	35	5	+ 12.5	2.5	10
BZY88-C16	15.3-17.1	40	5	+ 13	2.5	10
BZY88-C18	16.8-19.1	45	5	+ 15	2.5	13
BZY88-C20	18.8-21.2	50	5	+ 17	2.5	14
BZY88-C22	20.8-23.3	60	5	+ 19	2.5	15
BZY88-C24	22.8-25.6	75	5	+ 21	2.5	17
BZY88-C27	25.1-28.9	85	5	+ 23.5	2.5	19
BZY88-C30	28-32	95	5	+ 26	2.5	21
BZY88-C33	31-35	120	5	+ 28	2.5	23

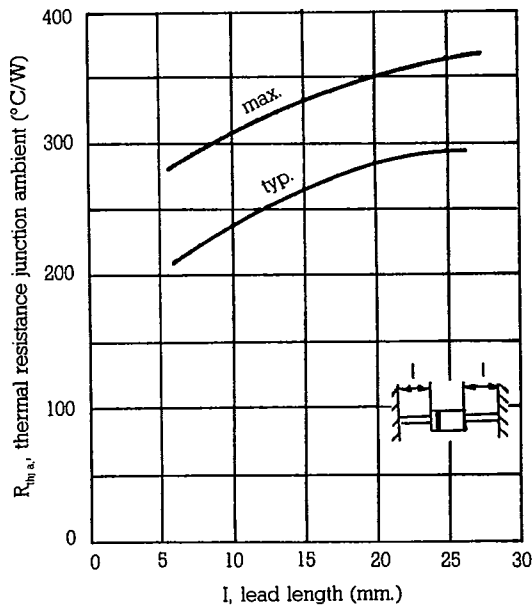
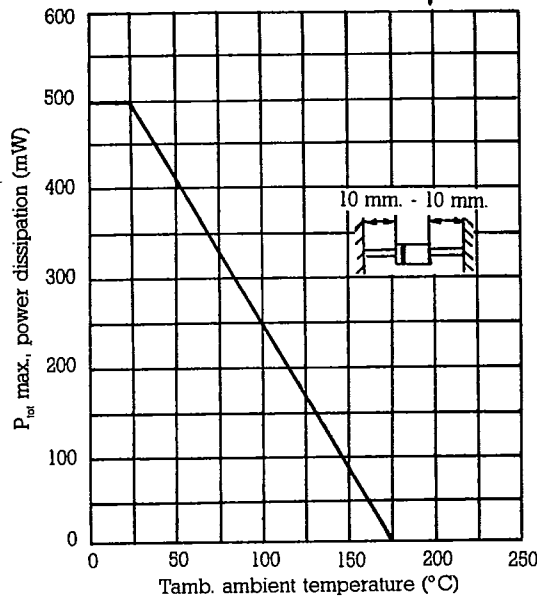


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 Characteristic Curves

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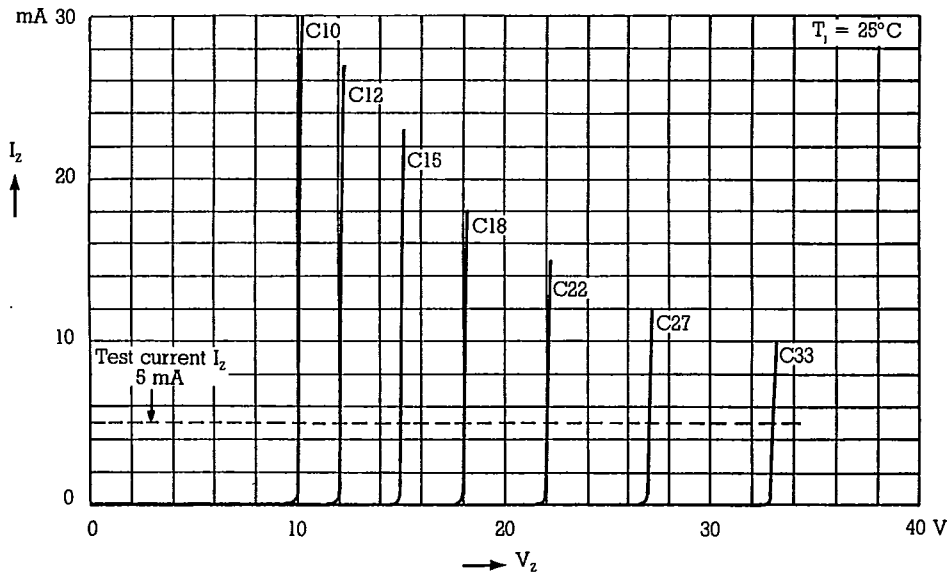
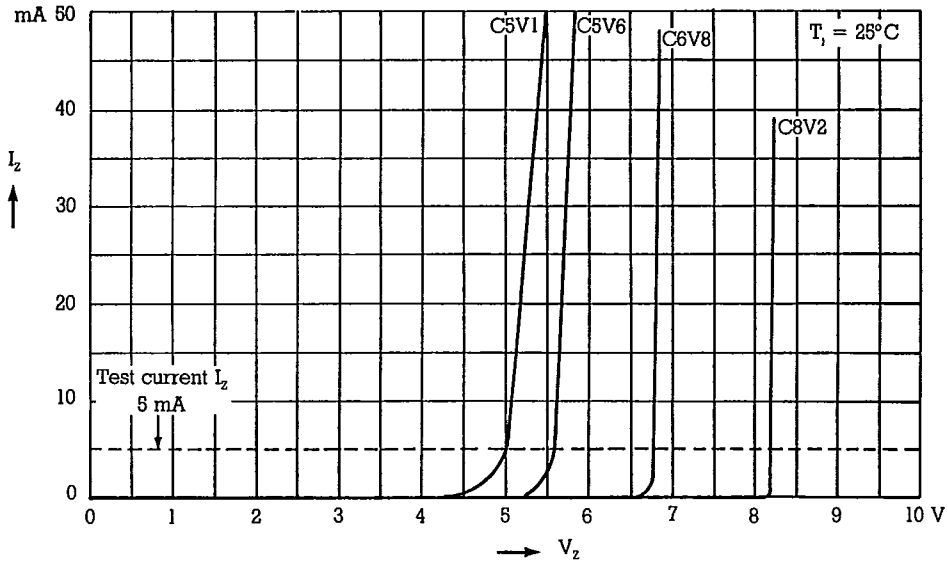
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Breakdown characteristics at $T_j = \text{constant}$ (Pulsed)



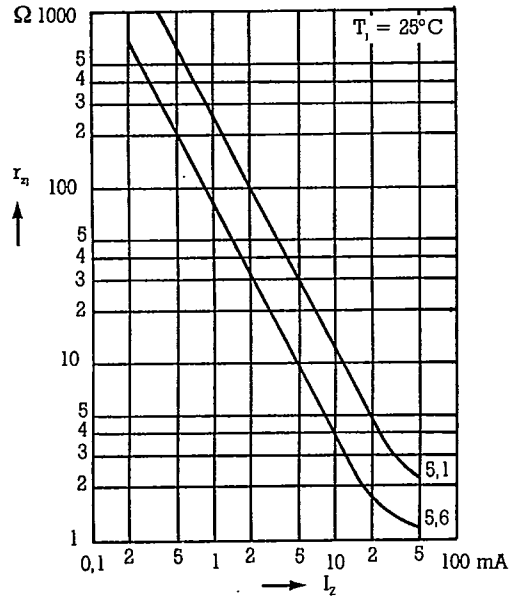


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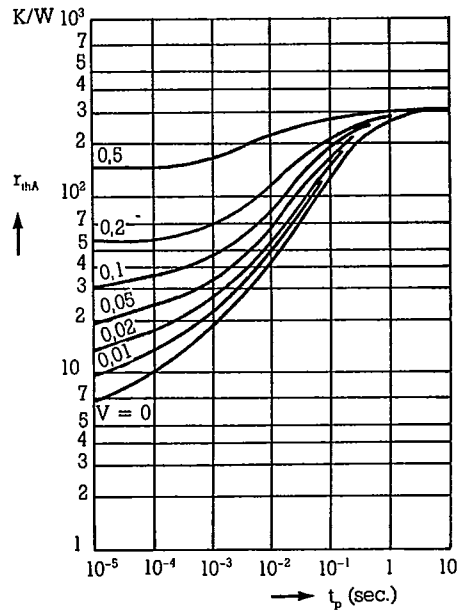
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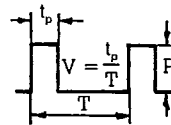
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Dynamic resistance versus Zener current.



Pulse thermal resistance versus pulse duration. Valid provided that leads are kept at ambient temperature at a distance of 8 mm. from case.



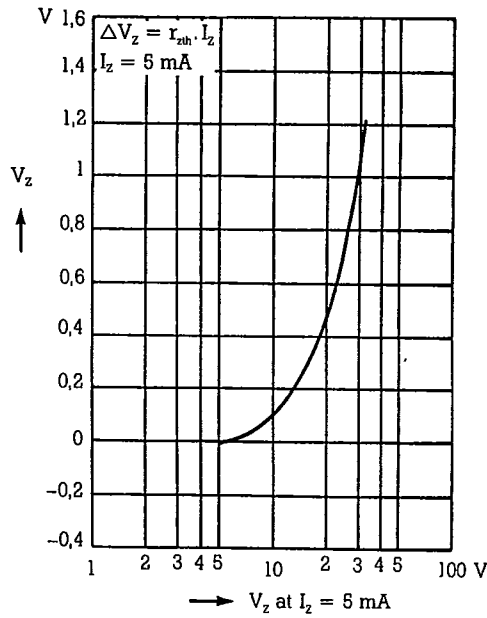
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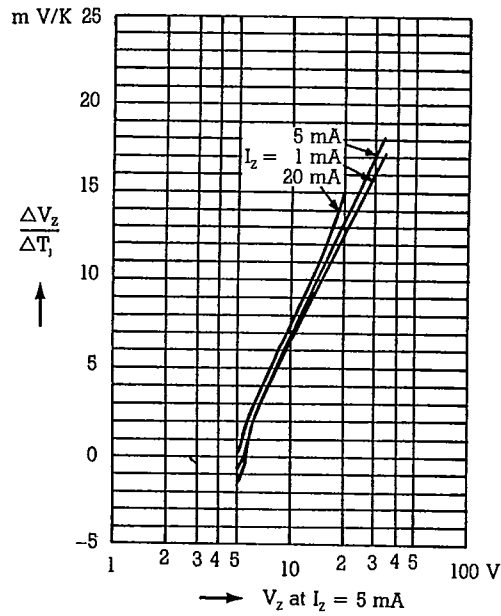
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Change of Zener voltage from turn-on up to the point of thermal equilibrium versus Zener voltage.



Temperature dependence of Zener voltage versus Zener voltage.



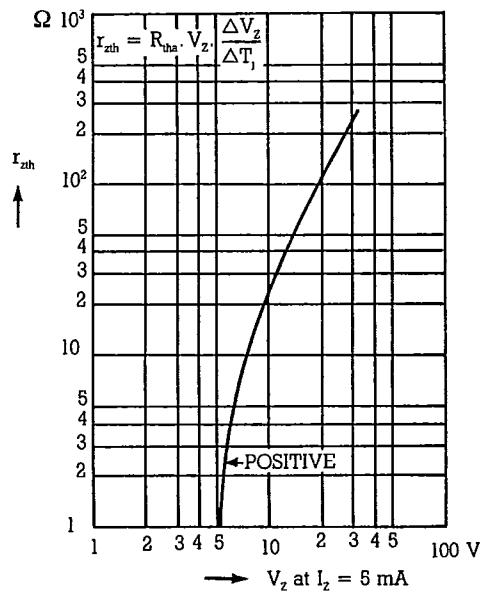
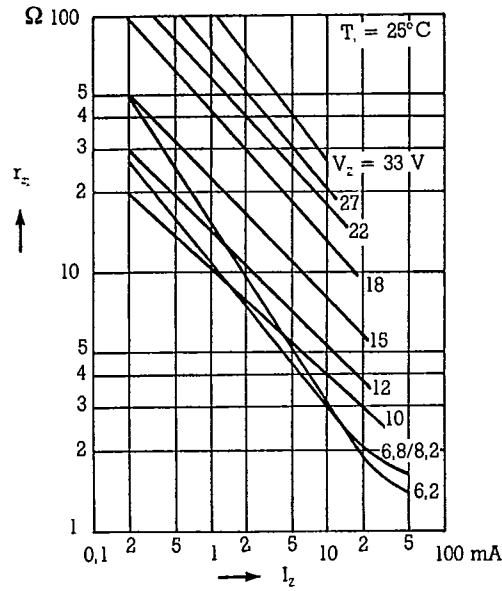
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Dynamic resistance versus Zener current.



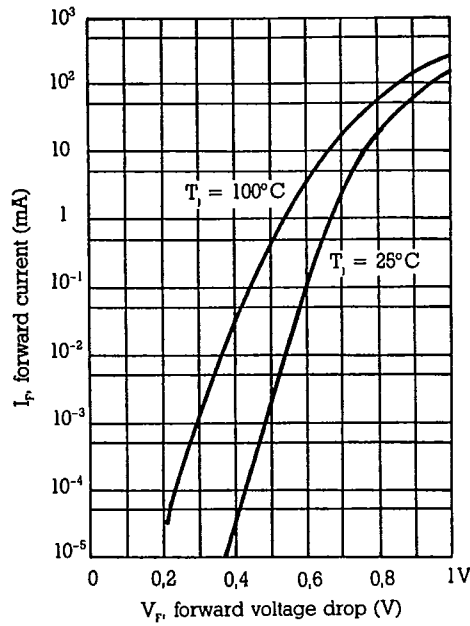
Thermal differential resistance versus Zener voltage. Valid provided that leads are kept at ambient temperature at a distance of 8 mm. from case.

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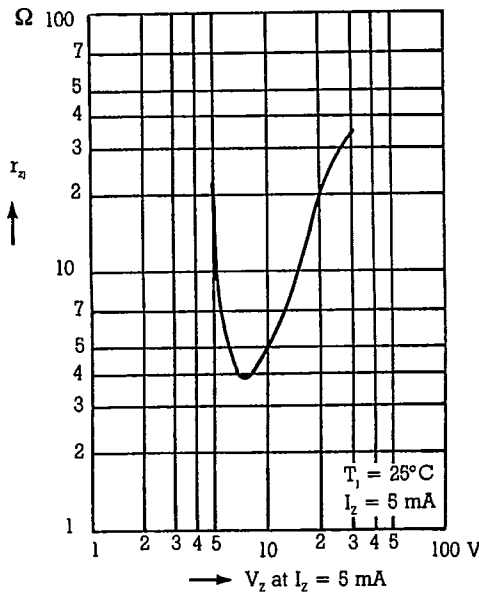


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Forward characteristics.



Dynamic resistance versus Zener voltage.

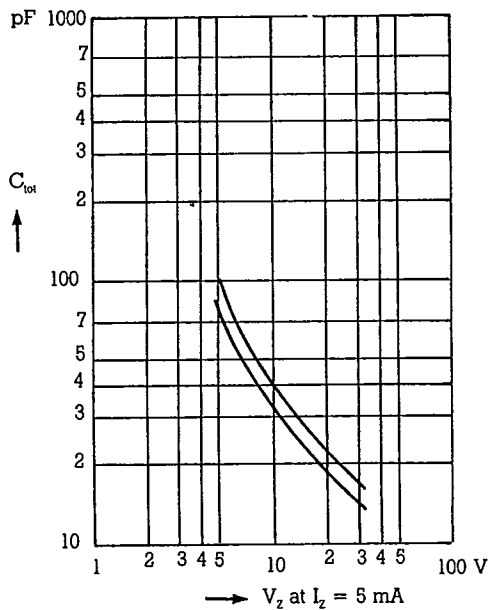
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Capacitance versus Zener voltage.



Change of Zener voltage versus junction temperature.

