



BZY88C5V1 BZY88C33V

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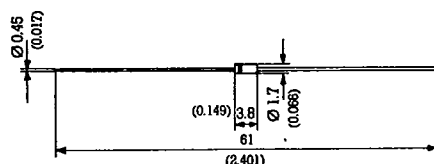
98D 00193

D

0.5 W Zener Diodes

T-11-11

Dimensions in mm. (inches)

DO-35
(Glass)Voltage
5.1 to 33 V.Power
0.5 WStandard Voltage Tolerance is $\pm 5\%$

Mounting instructions

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.

- 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_{slg}	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



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Type	Zener Voltage Range at $I_z = 5 \text{ mA}$ V_z	Maximum Zener Impedance		Typical Temperature Coefficient	Maximum Reverse Leakage Current	
		Z_{zt}	I_z		I_r	at V_r
	(V)	(Ω)	(mA)	(mV/ $^{\circ}\text{C}$)	(μA)	(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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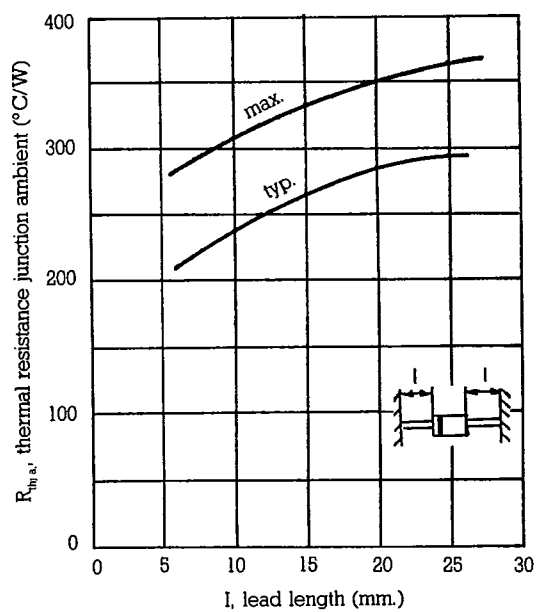
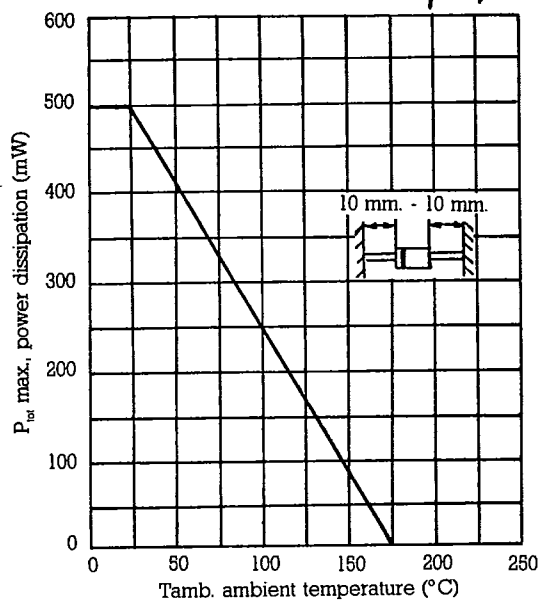
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Characteristic Curves

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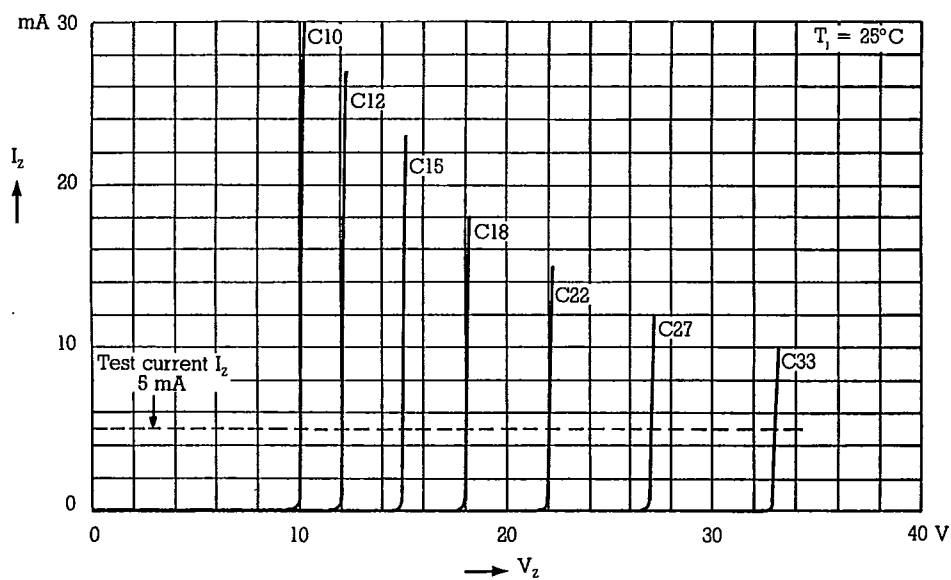
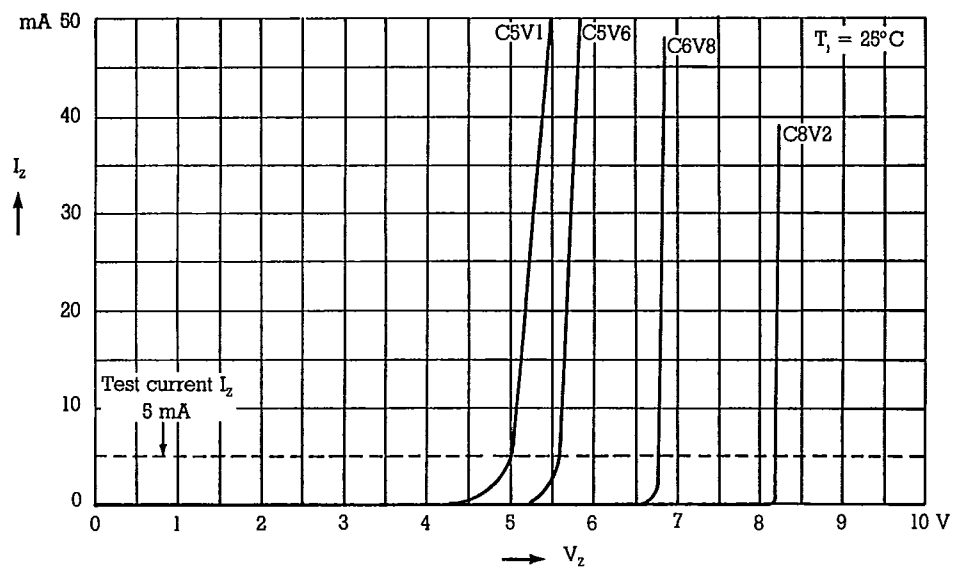
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Breakdown characteristics at $T_j = \text{constant}$ (Pulsed)

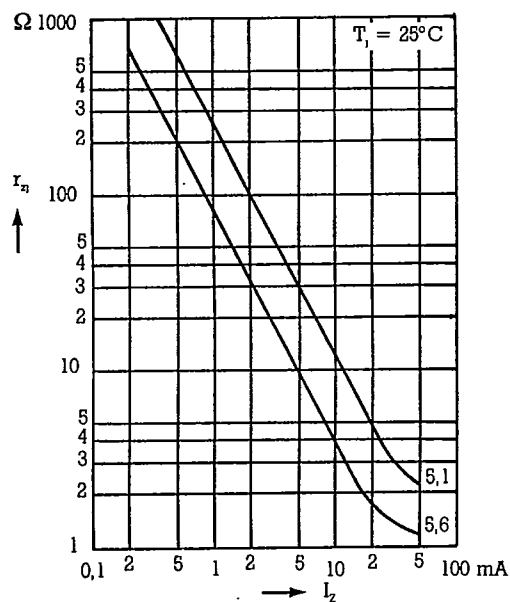


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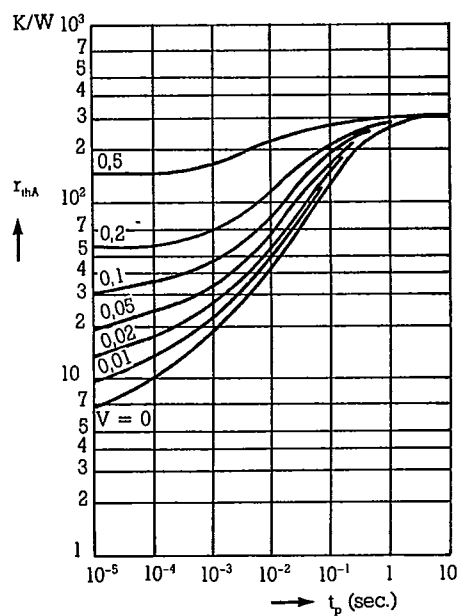
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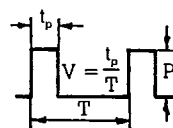
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Dynamic resistance versus Zener current.



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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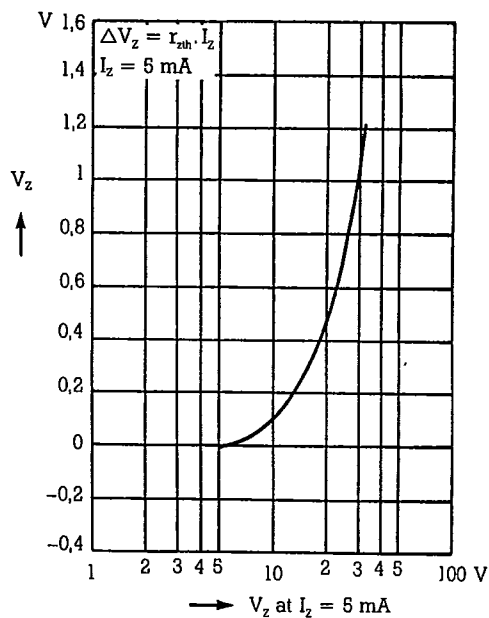


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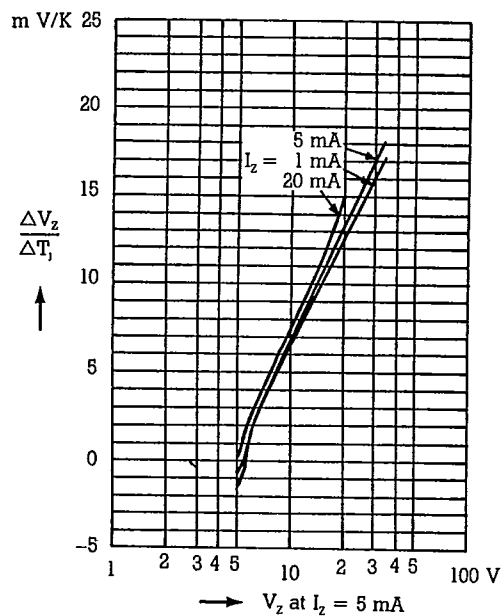
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Change of Zener voltage
 from turn-on up to the point of
 thermal equilibrium versus
 Zener voltage.



Temperature dependence of
 Zener voltage versus Zener
 voltage.



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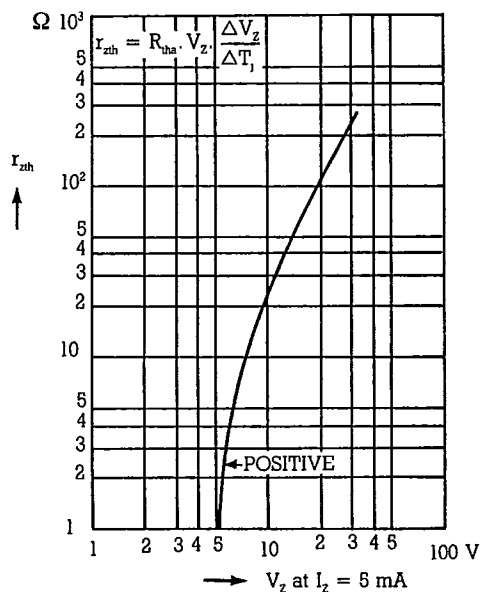
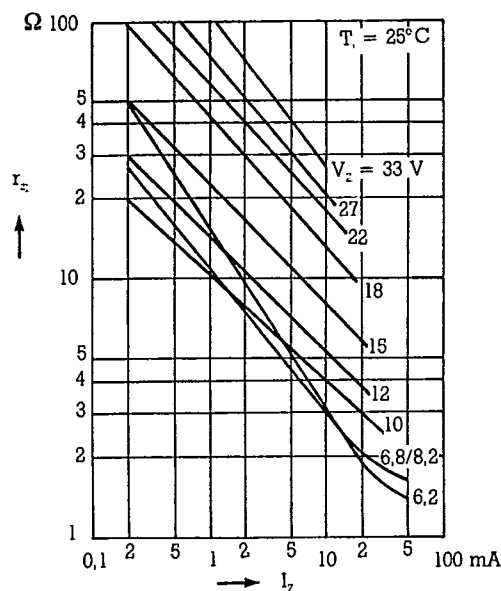
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Dynamic resistance versus
Zener current.



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

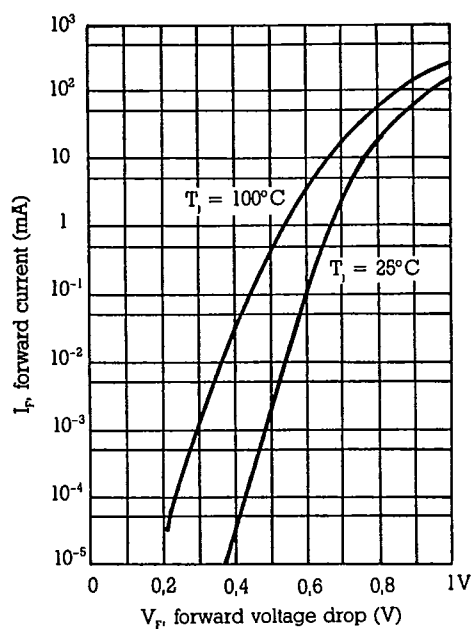
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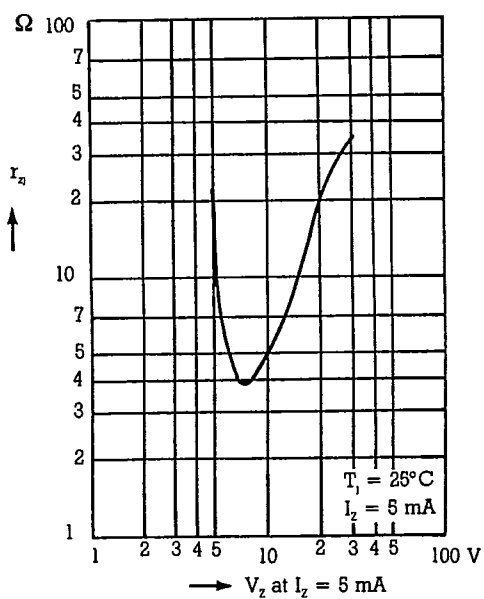
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Forward characteristics.



Dynamic resistance versus Zener voltage.



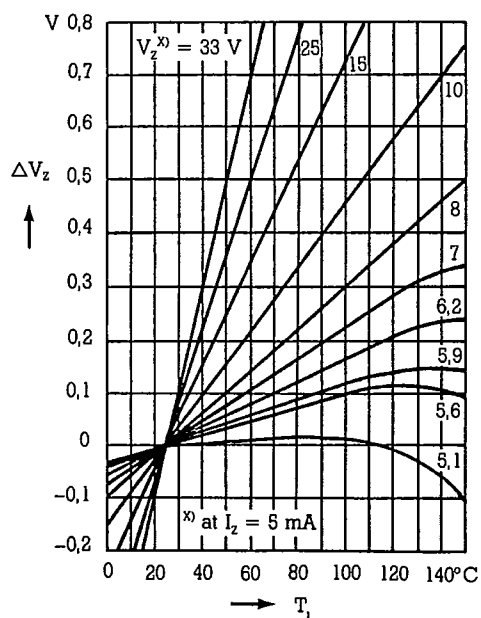
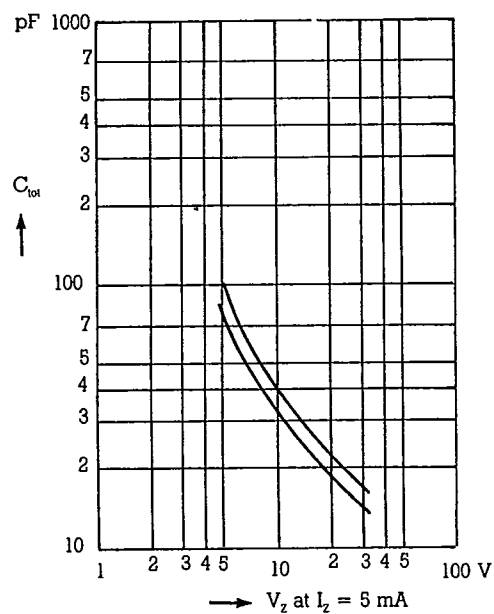
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Capacitance versus Zener voltage.



Change of Zener voltage versus junction temperature.