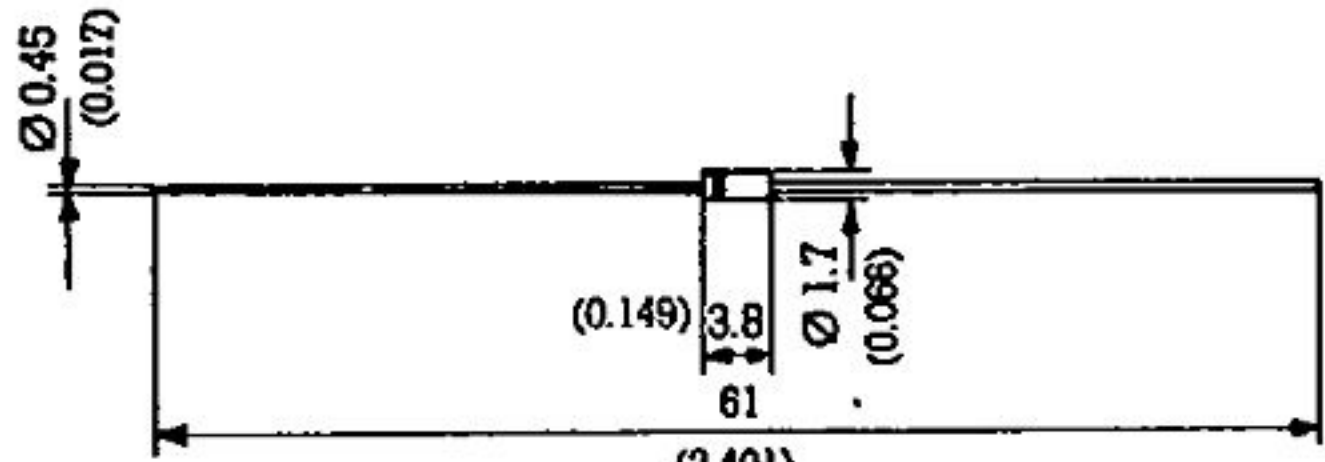


0.5 W Zener Diodes

Dimensions in mm. (inches)	DO-35 (Glass)	Voltage 5.1 to 33 V. Power 0.5 W
	Standard Voltage Tolerance is $\pm 5\%$	• Low cost • DO-35 Glass case • Terminals: Axial Leads • Polarity: Color band denotes cathode
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.		

Maximum Ratings, according to IEC publication No. 134

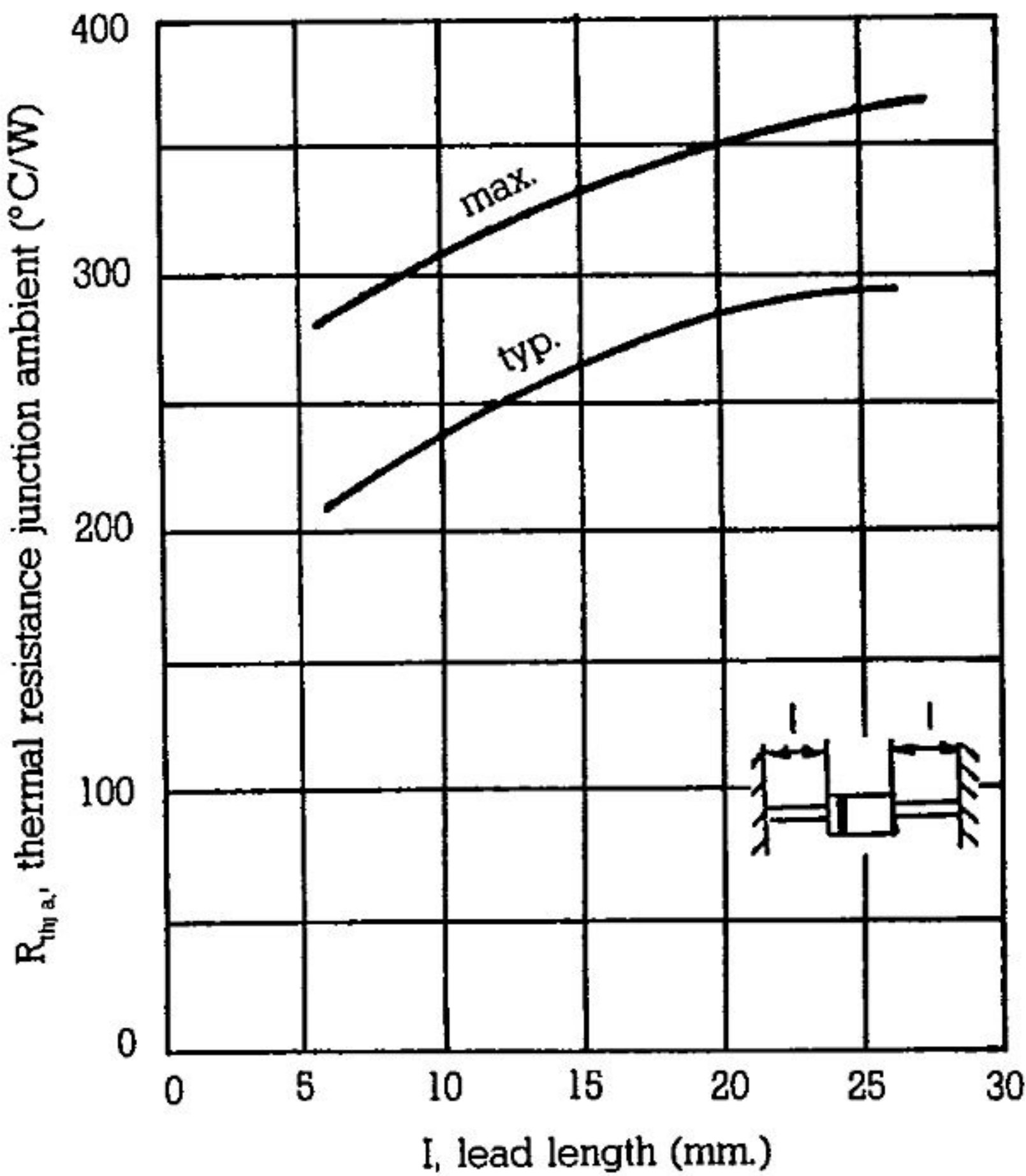
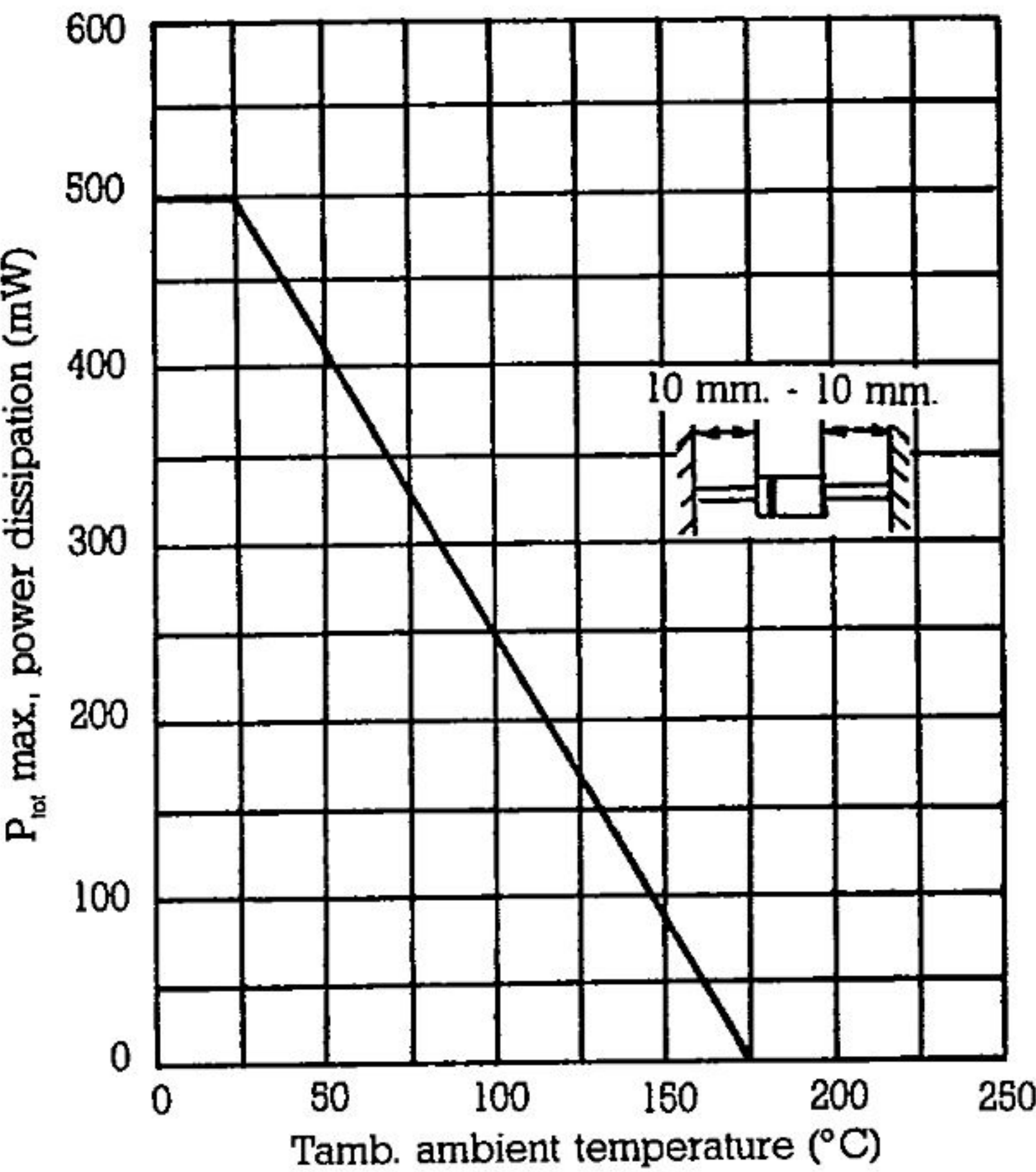
P_{tot}	Power dissipation at $T_{amb} = 25^{\circ}\text{C}$	500 mW
P_{ZSM}	Non repetitive peak zener dissipation ($T_j = 25^{\circ}\text{C}$, $t = 1\text{ ms}$)	12 W
T_j	Max. operating temperature	175°C
T_{stg}	Storage temperature range	- 50°C to + 175°C

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

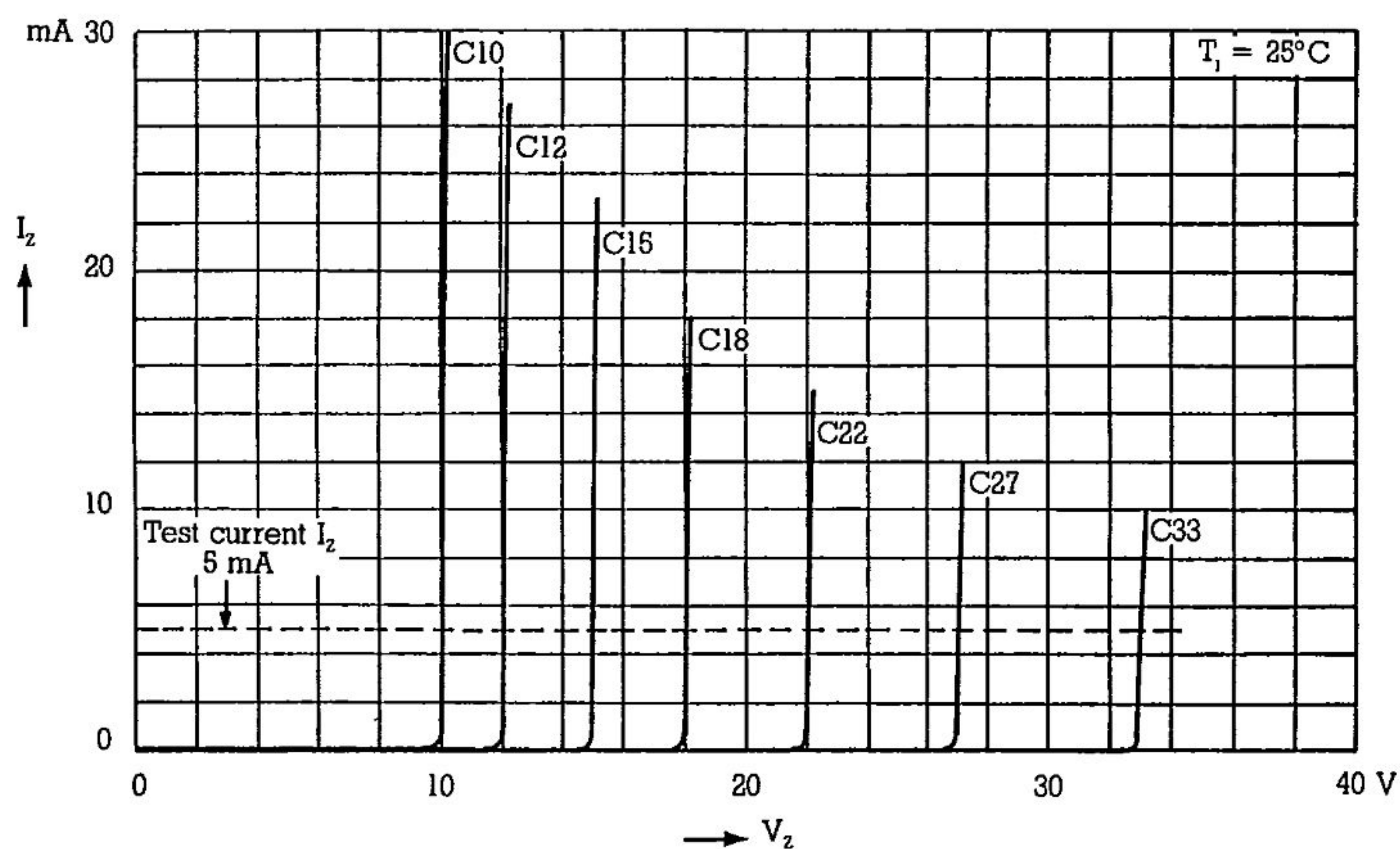
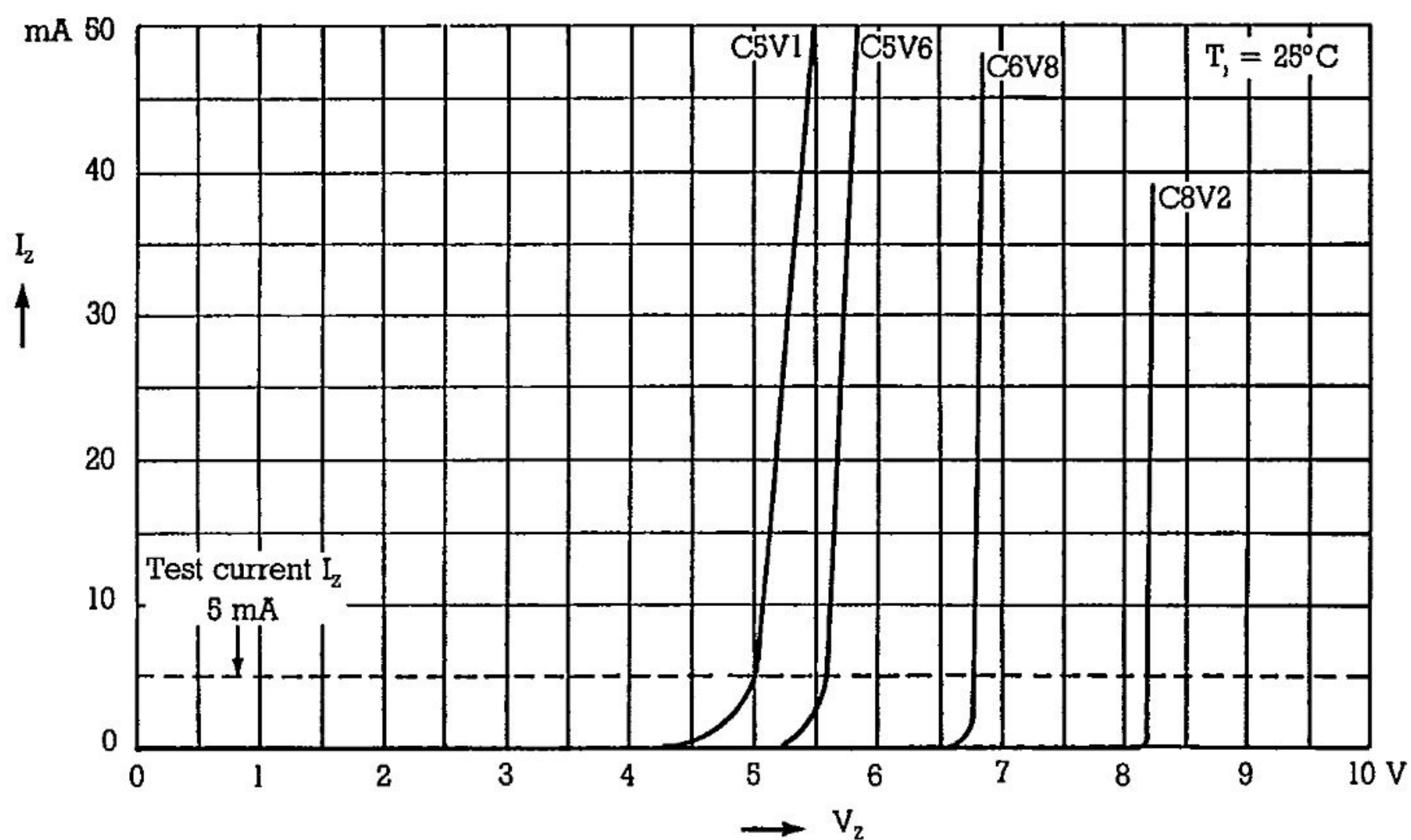
V_F	Max. forward voltage drop at $I_F = 200\text{ mA}$	1,2 V
R_{th-a}	Max. thermal resistance at: 8 mm. lead length	0,30°C/mW

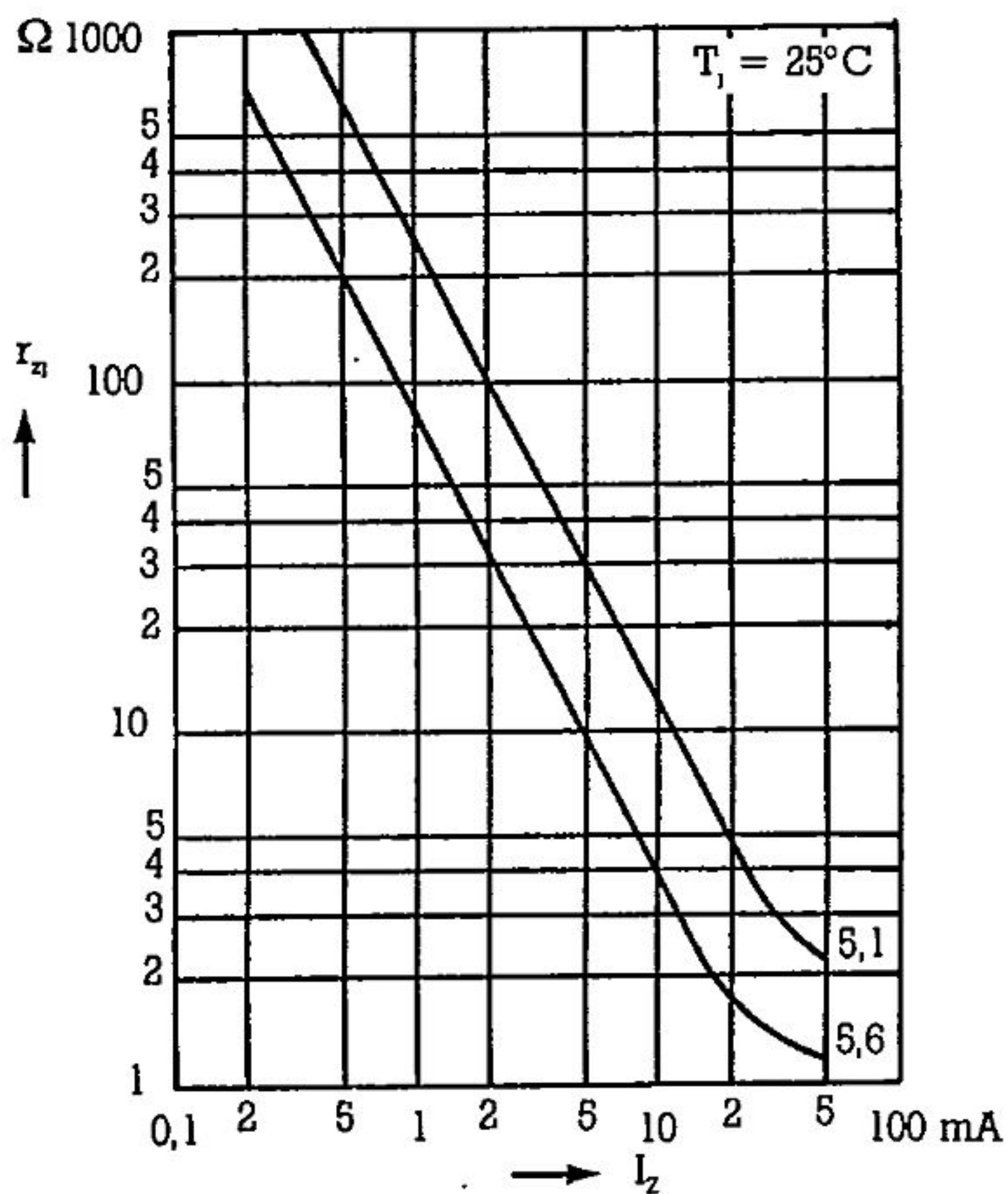
Type	Zener Voltage Range at $I_z = 5\text{ mA}$ V_z	Maximum Zener Impedance		Typical Temperature Coefficient	Maximum Reverse Leakage Current	
	(V)	Z_{zt} (Ω)	I_z (mA)		I_r (μA)	at V_r (V)
BZY88-C5V1	4.8-5.4	75	5	- 1.2	1	2
BZY88-C5V6	5.2-6.0	55	5	- 0.2	1	2
BZY88-C6V2	5.8-6.6	27	5	+ 2	1	2
BZY88-C6V8	6.4-7.2	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	8.5-9.6	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

Characteristic Curves

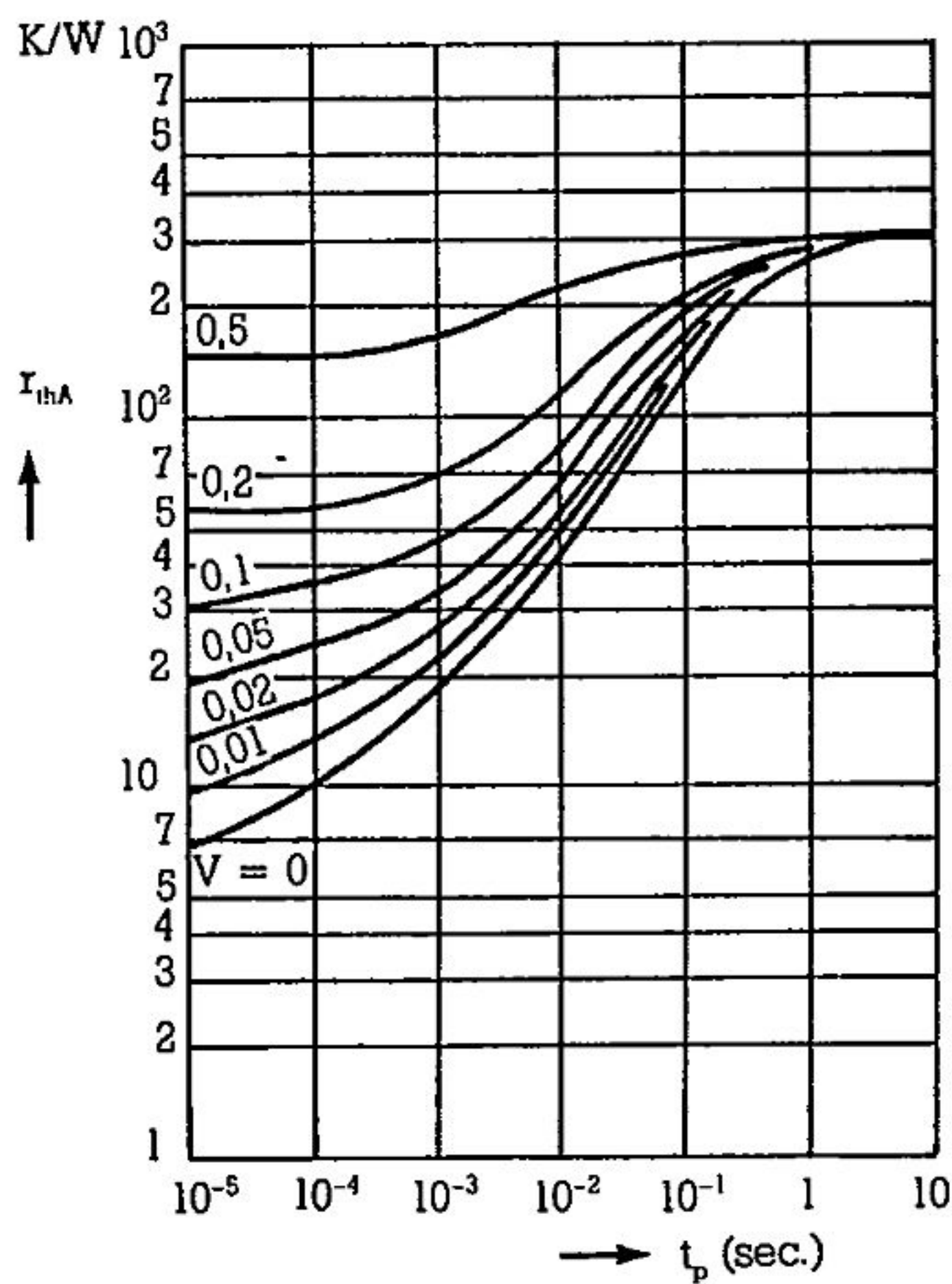


Breakdown characteristics at $T_j = \text{constant}$ (Pulsed)

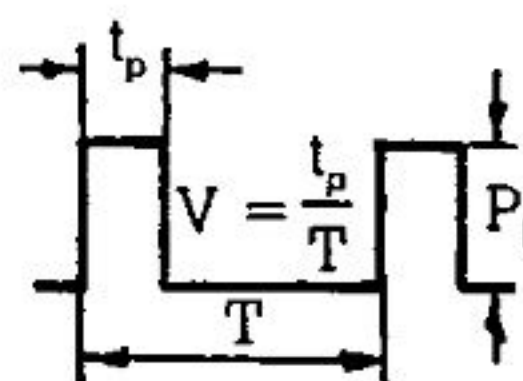


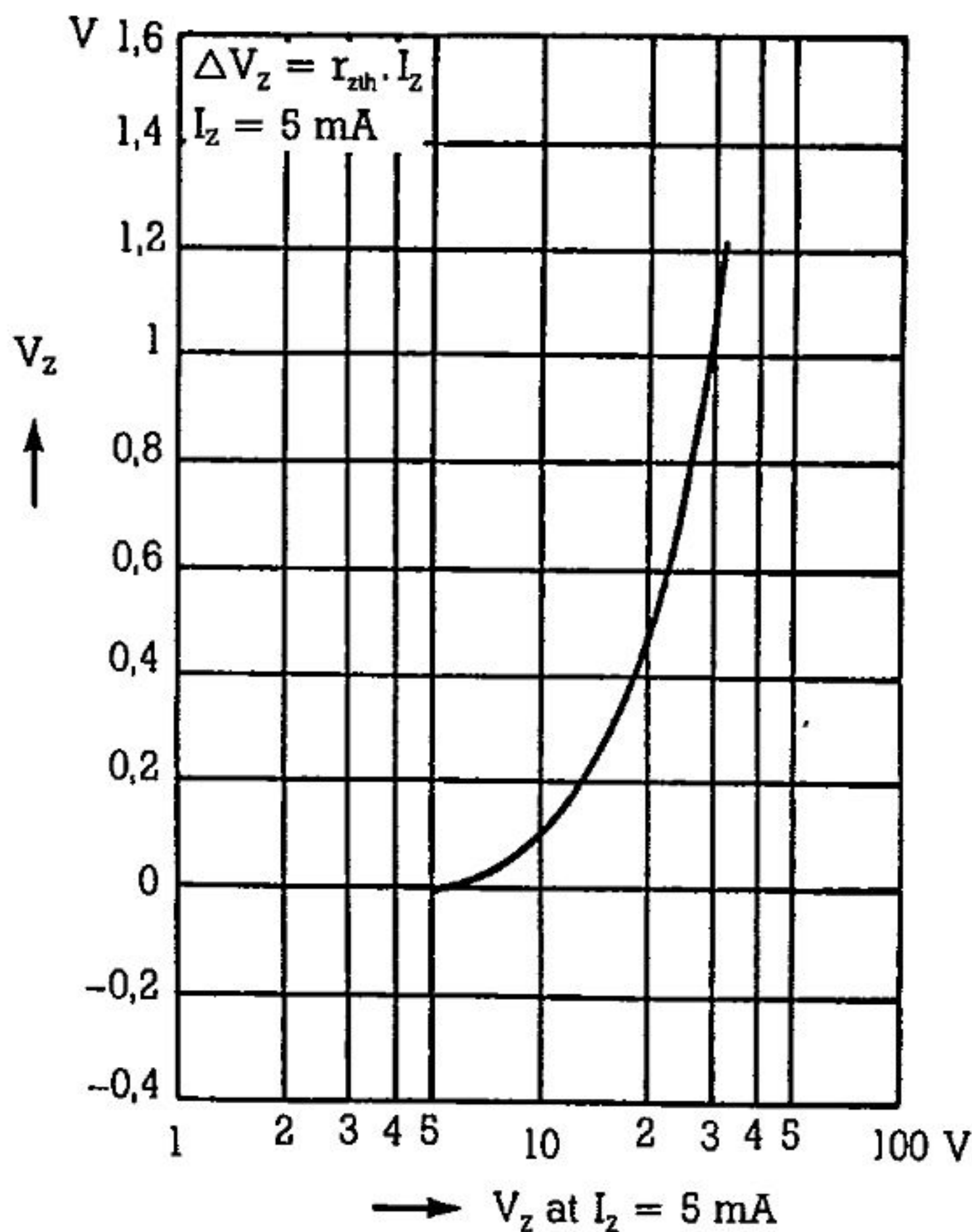


Dynamic resistance versus Zener current.

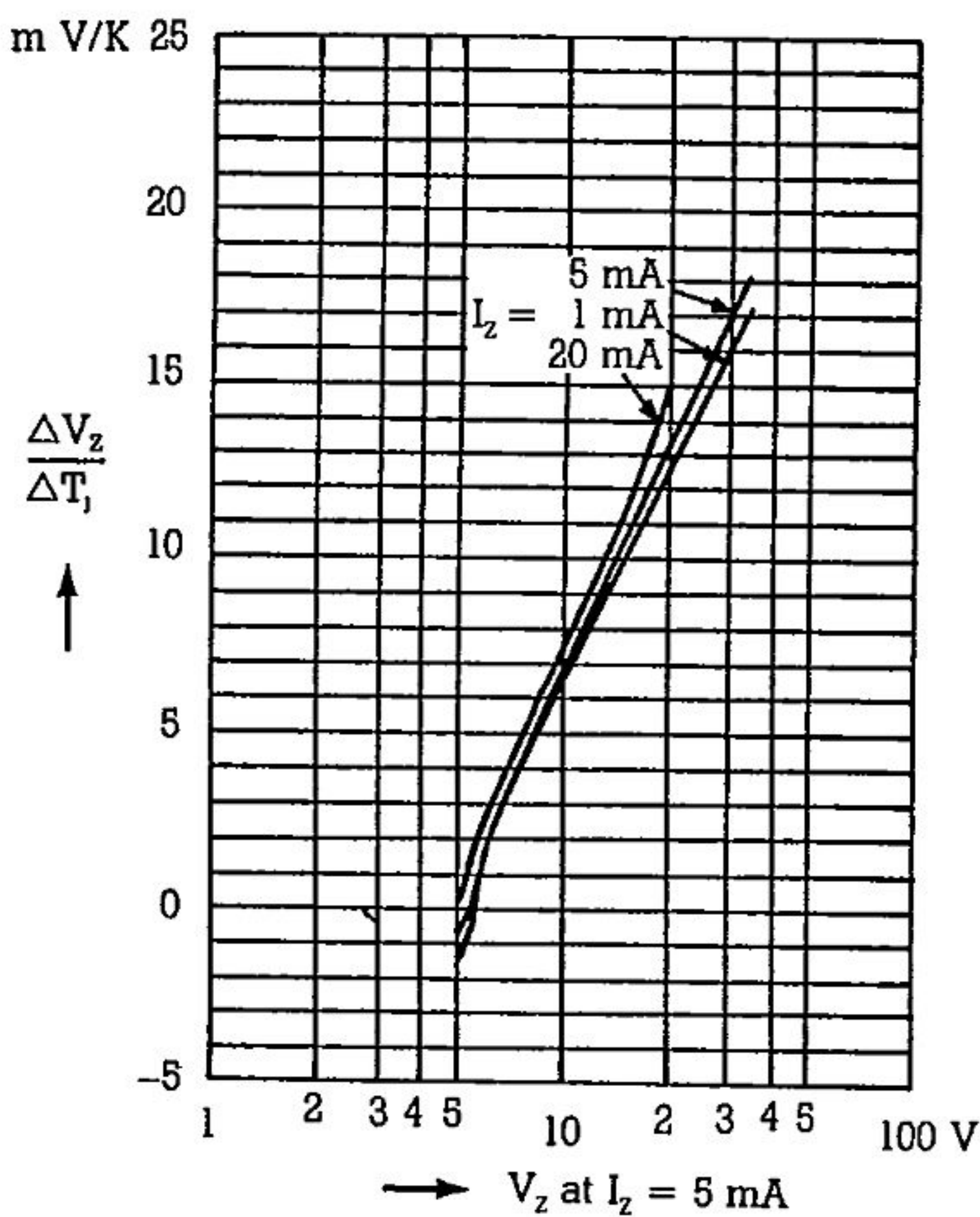


Pulse thermal resistance versus pulse duration. Valid provided that leads are kept at ambient temperature at a distance of 8 mm. from case.

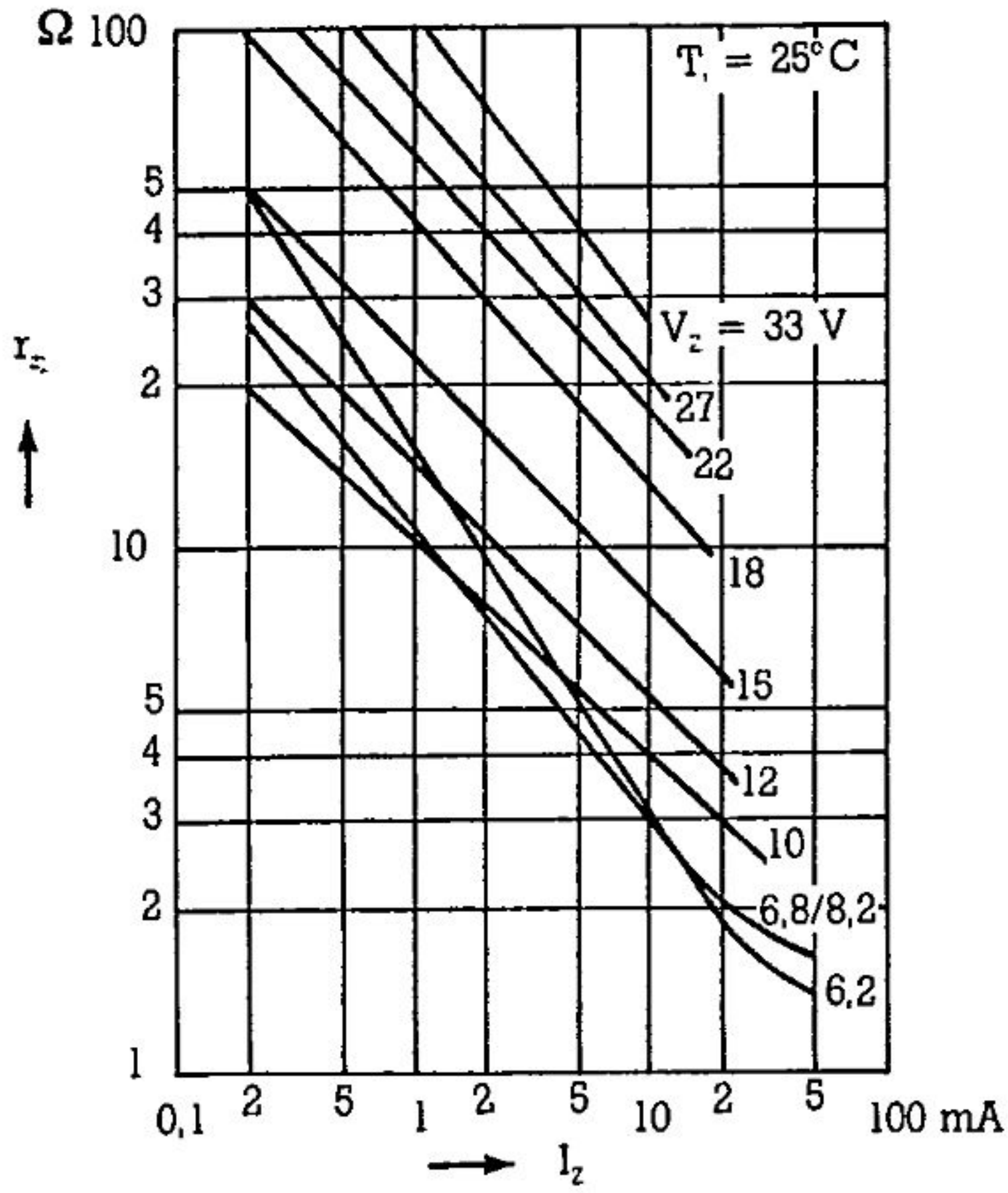




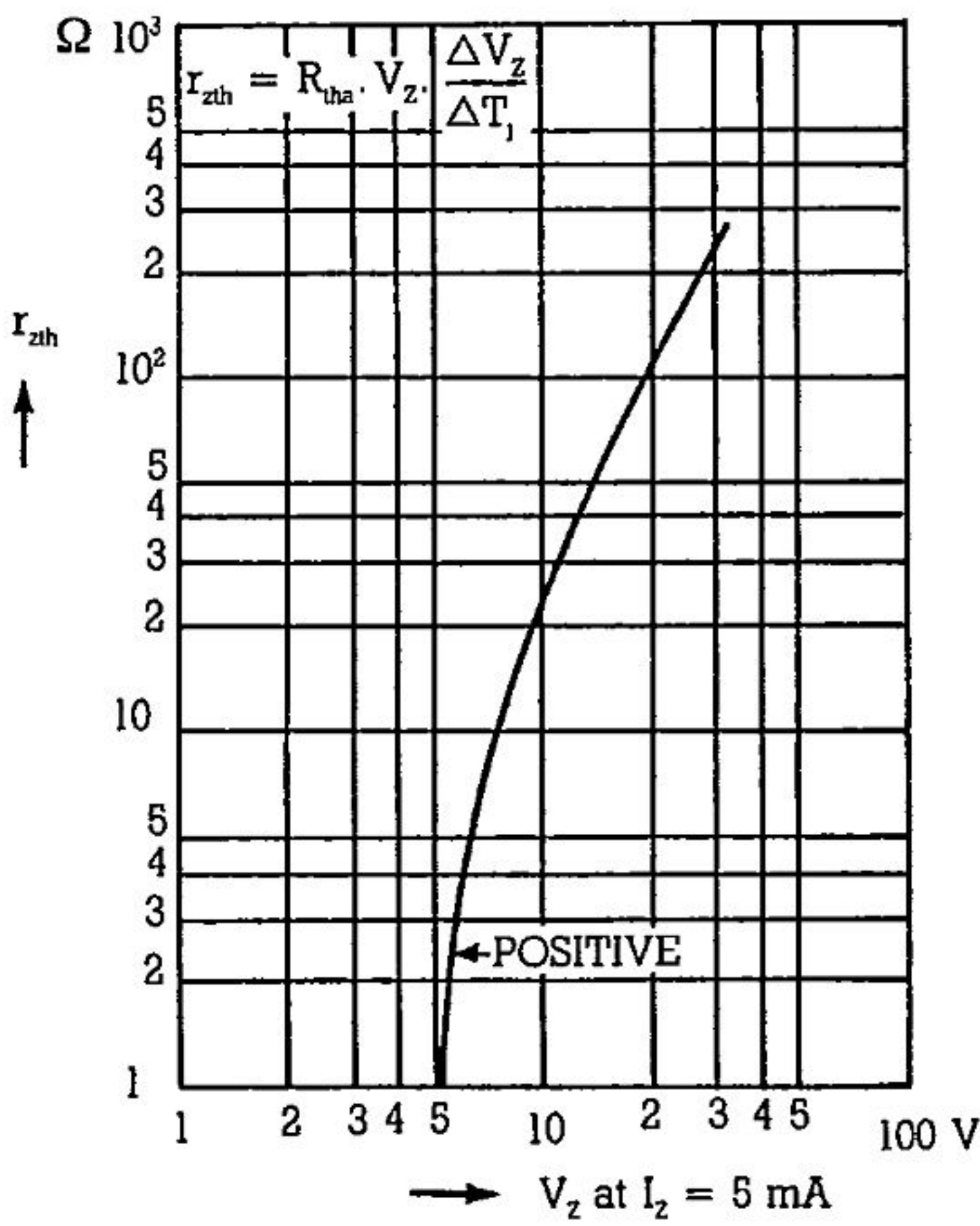
Change of Zener voltage from turn-on up to the point of thermal equilibrium versus Zener voltage.



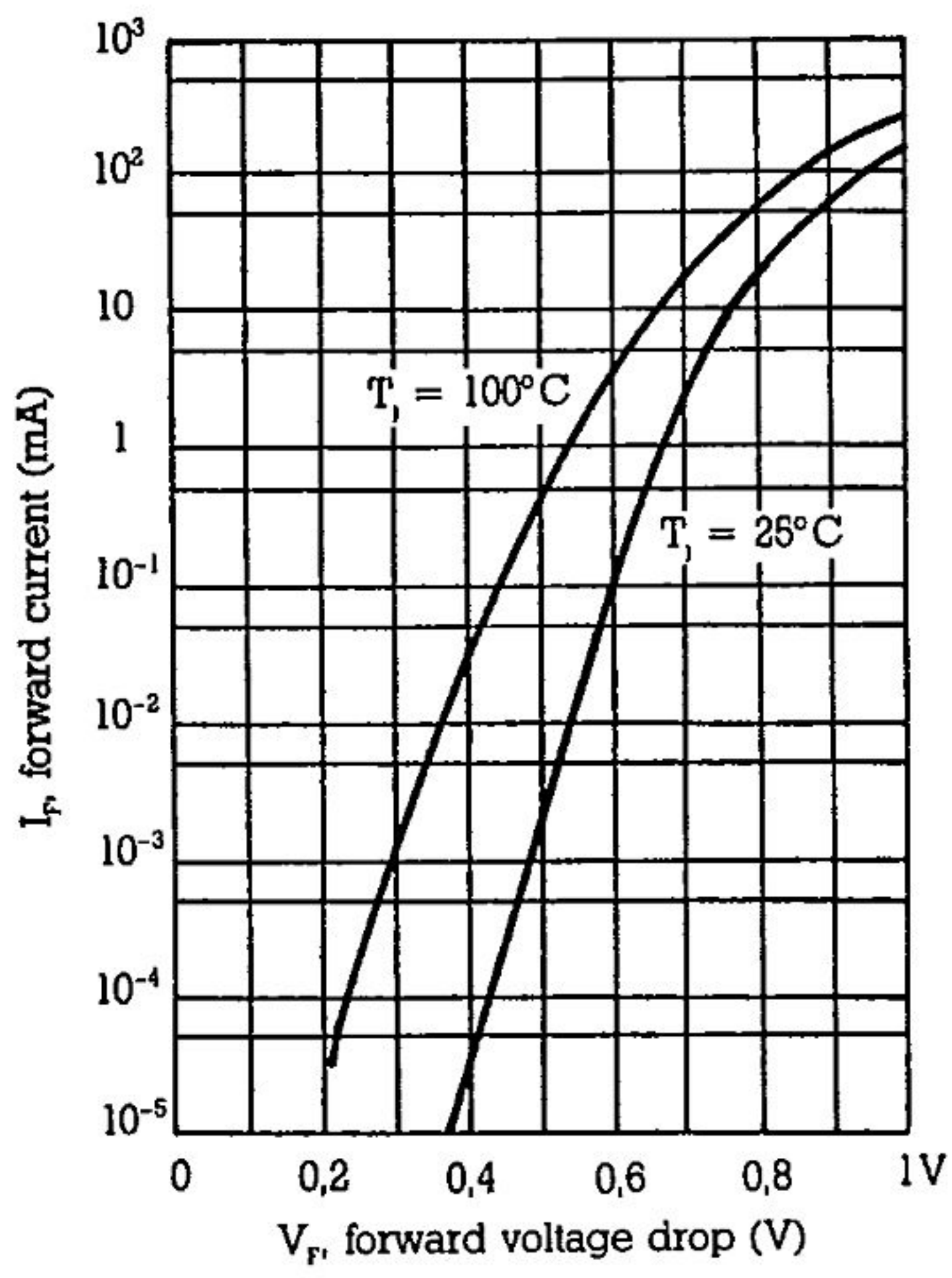
Temperature dependence of Zener voltage versus Zener voltage.



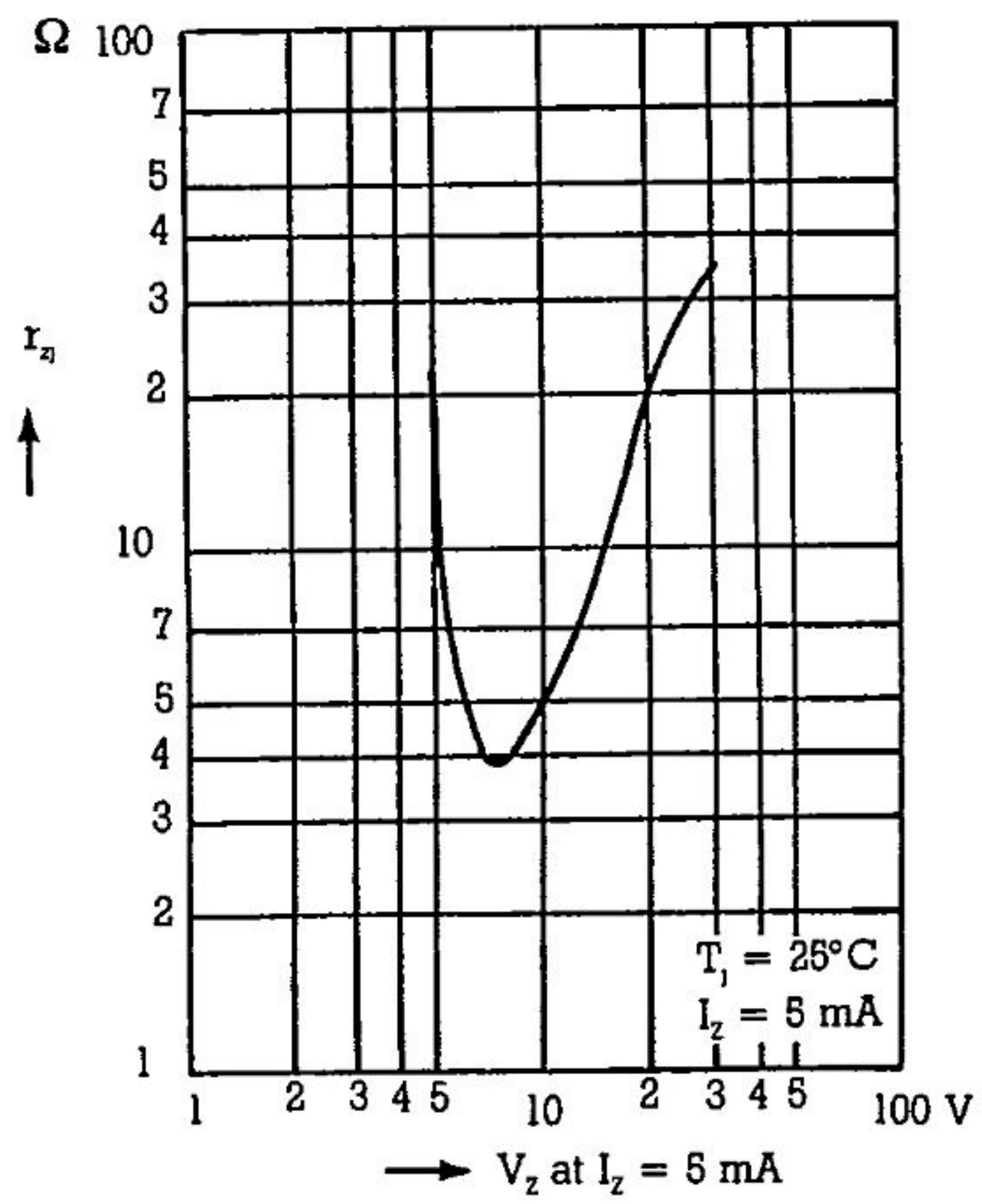
Dynamic resistance versus Zener current.



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



Forward characteristics.



Dynamic resistance versus Zener voltage.

