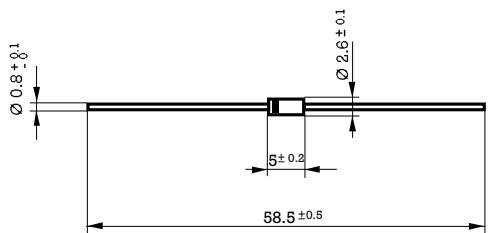


## 1.5 W Zener Diodes

<p>Dimensions in mm.</p>  <p>DO-41 (Plastic)</p>	<p>Voltage 10 to 200 V</p> <p>Power 1.5 W</p>
<p><b>Mounting instructions</b></p> <ol style="list-style-type: none"> <li>1. Min. distance from body to soldering point, 4 mm.</li> <li>2. Max. solder temperature, 350 °C.</li> <li>3. Max. soldering time, 3.5 sec.</li> <li>4. Do not bend lead at a point closer than 2 mm. to the body.</li> </ol>	<ul style="list-style-type: none"> <li>• Diffused junction</li> <li>• The plastic material carries U/L recognition 94 V-0</li> <li>• Terminals: Axial Leads</li> <li>• Polarity: Color band denotes cathode</li> </ul>

### Maximum Ratings, according to IEC publication No. 134

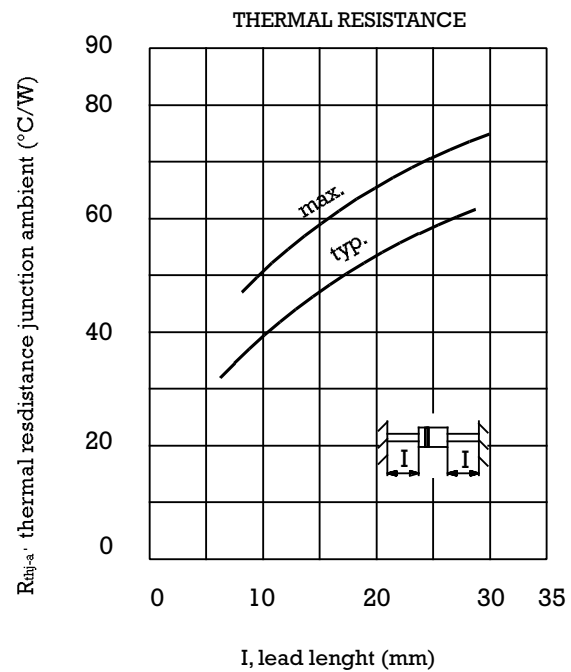
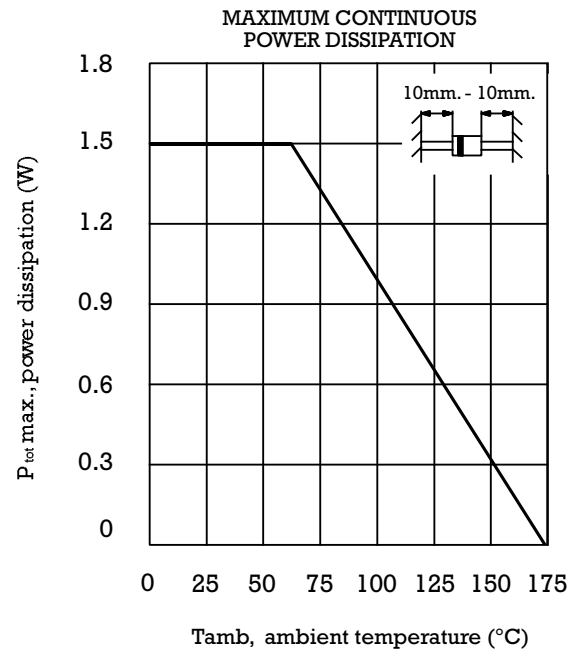
$P_{tot}$	Power dissipation at $T_{amb} = 60\text{ °C}$	1.5 W
$P_{ZSM}$	Non repetitive peak zener dissipation (t = 10 ms.)	40 W
$T_j$	Operating temperature range	- 55 to + 175 °C
$T_{stg}$	Storage temperature range	- 55 to + 175 °C

### Electrical Characteristics at $T_{amb} = 25\text{ °C}$

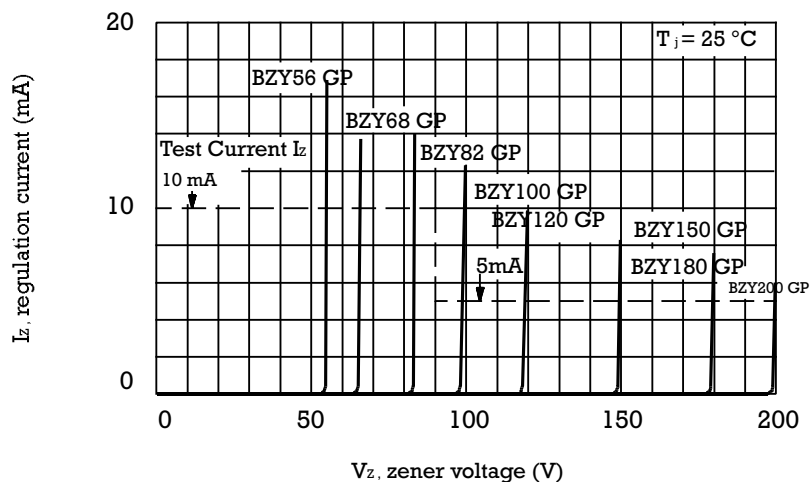
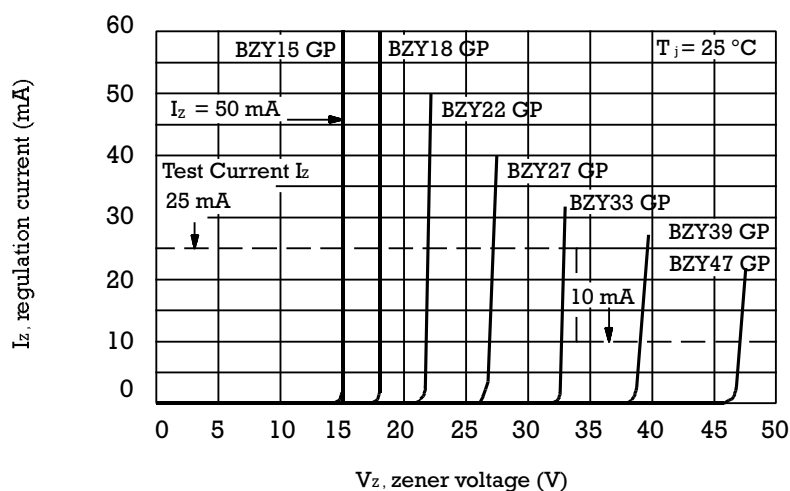
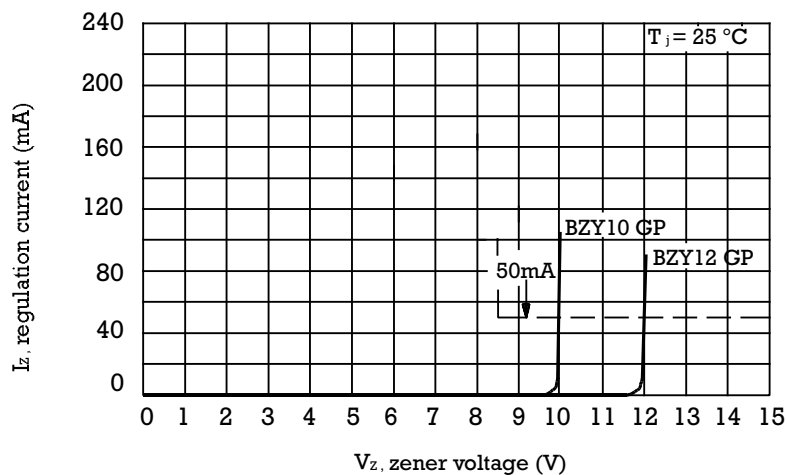
$V_F$	Max. forward voltage drop at $I_F = 1.0\text{ A}$	1.1 V
$R_{thj-a}$	Max. thermal resistance at 10 mm. lead length	50° C/W

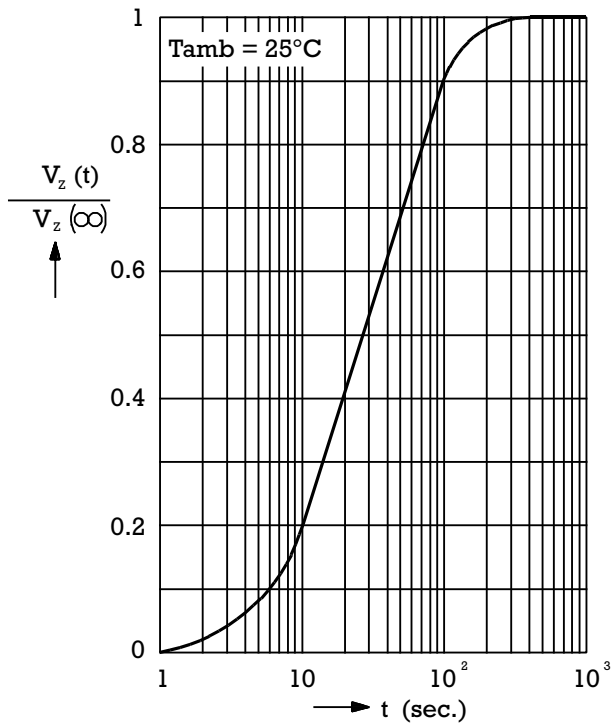
Type	Zener Voltage Range $V_Z$ at $I_{ZT}$	Maximum Zener Impedance $Z_{ZT}$ at $I_{ZT}$	Typical Temperature Coefficient at $I_{ZT}$	Test Current $I_{ZT}$	Min. Reverse Voltage at $I_R = 1 \mu A$ $V_R$
	(V)	( $\Omega$ )	(% / °C)	(mA)	(V)
<b>BZY97C10 GP</b>	9.4 - 10.6	4	+ 0.070	50	5.0
<b>BZY97C11 GP</b>	10.4 - 11.6	7	+ 0.075	50	5.0
<b>BZY97C12 GP</b>	11.4 - 12.7	7	+ 0.075	50	7.0
<b>BZY97C13 GP</b>	12.4 - 14.1	10	+ 0.075	50	7.0
<b>BZY97C15 GP</b>	13.8 - 15.8	10	+ 0.075	50	10
<b>BZY97C16 GP</b>	15.3 - 17.1	15	+ 0.085	25	10
<b>BZY97C18 GP</b>	16.8 - 19.1	15	+ 0.085	25	10
<b>BZY97C20 GP</b>	18.8 - 21.2	15	+ 0.085	25	10
<b>BZY97C22 GP</b>	20.8 - 23.3	15	+ 0.085	25	12
<b>BZY97C24 GP</b>	22.8 - 25.6	15	+ 0.085	25	12
<b>BZY97C27 GP</b>	25.1 - 28.9	15	+ 0.085	25	14
<b>BZY97C30 GP</b>	28 - 32	15	+ 0.085	25	14
<b>BZY97C33 GP</b>	31 - 35	15	+ 0.085	25	17
<b>BZY97C36 GP</b>	34 - 38	40	+ 0.085	10	17
<b>BZY97C39 GP</b>	37 - 41	40	+ 0.085	10	20
<b>BZY97C43 GP</b>	40 - 46	45	+ 0.095	10	20
<b>BZY97C47 GP</b>	44 - 50	45	+ 0.095	10	24
<b>BZY97C51 GP</b>	48 - 54	60	+ 0.095	10	24
<b>BZY97C56 GP</b>	52 - 60	60	+ 0.095	10	28
<b>BZY97C62 GP</b>	58 - 66	80	+ 0.105	10	28
<b>BZY97C68 GP</b>	64 - 72	80	+ 0.105	10	34
<b>BZY97C75 GP</b>	70 - 79	100	+ 0.105	10	34
<b>BZY97C82 GP</b>	77 - 88	100	+ 0.105	10	41
<b>BZY97C91 GP</b>	85 - 96	200	+ 0.11	5	41
<b>BZY97C100 GP</b>	94 - 106	200	+ 0.11	5	50
<b>BZY97C110 GP</b>	104 - 116	250	+ 0.11	5	50
<b>BZY97C120 GP</b>	114 - 127	250	+ 0.11	5	60
<b>BZY97C130 GP</b>	124 - 141	300	+ 0.11	5	60
<b>BZY97C150 GP</b>	138 - 156	300	+ 0.11	5	75
<b>BZY97C160 GP</b>	153 - 171	350	+ 0.11	5	75
<b>BZY97C180 GP</b>	168 - 191	350	+ 0.11	5	90
<b>BZY97C200 GP</b>	188 - 212	350	+ 0.11	5	90

Characteristic Curves

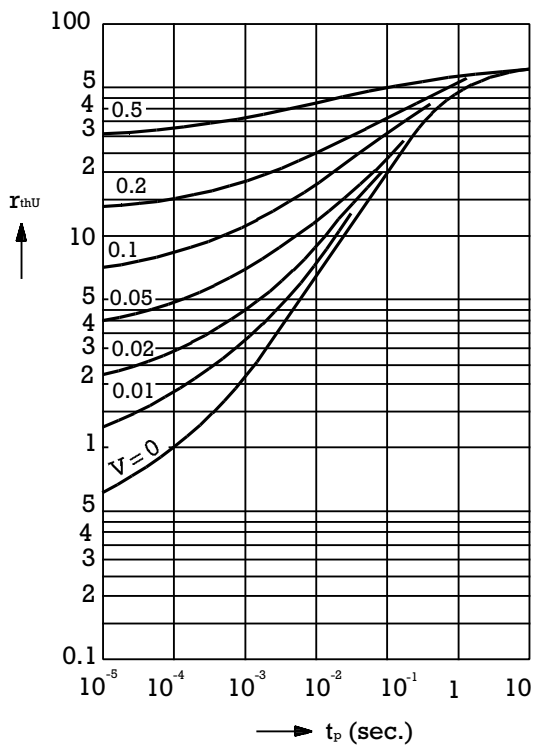


BREAKDOWN CHARACTERISTICS





Relative change of Zener voltage versus turn-on time.



Pulse thermal resistance versus pulse duration. Valid provided that leads are kept at ambient temperature at a distance of 10mm. from case.

