

DIAC

<p><b>Dimensions in mm.</b></p> <p style="text-align: center;"><b>DO-35 Glass Axial Package</b></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, 250 °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>• Silicon bi-directional trigger device intended for use in thyristor (SCR and TRIAC) trigger circuits, energy saving lighting circuits and other switching functions.</li> </ul> <p style="text-align: center;">                 BREAKOVER VOLTAGE      ON-STATE CURRENT                  32 V                              2.0 Amps             </p> <p><b>SPECIAL FEATURES:</b></p> <ul style="list-style-type: none"> <li>• Low breakover current.</li> <li>• Excellent symmetry.</li> <li>• Very low leakage current.</li> </ul>
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**Absolute Maximum Ratings, according to IEC publication No. 134**

	PARAMETER	CONDITIONS	Min.	Typ.	Max.	Unit
$P_{tot}$	Total Power Dissipation	$T_a = 65\text{ °C}$			150	mW
$I_{TRM}$	Repetitive peak on-state current	$t_p = 20\ \mu s, f = 100\text{ Hz}$			2	A
$T_{stg}$	Storage Temperature Range		-40		+125	°C
$T_j$	Operating Junction Temperature		-40		+125	°C

**Thermal Resistance**

	PARAMETER	CONDITIONS	Min.	Typ.	Max.	Unit
$R_{th(j-a)}$	Junction to Ambient			400		°C/W
$R_{th(j-l)}$	Junction to leads			150		°C/W

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

	PARAMETER	CONDITIONS	Min.	Typ.	Max.	Unit
$V_{BO}$	Breakover Voltage *	$I_{BO}, C = 22\text{ nF}$ ** (see Figure 1)	28	32	36	V
$ V_{BO+} - V_{BO-} $	Breakover Voltage Symmetry	$I_{BO}, C = 22\text{ nF}$ ** (see Figure 1)			$\pm 3$	V
$ V_{\pm} $	Dynamic breakover voltage *	$I = [I_{BO} \text{ to } I_F = 10\text{ mA}]$ (see Figure 1)	5			V
$V_O$	Output Voltage *	(see Figure 3)	5			V
$I_{BO}$	Breakover Current *	$C = 22\text{ nF}$ **			50	$\mu A$
$t_r$	Rise Time *	(see Figure 4)		1.5		$\mu s$
$I_B$	Leakage Current *	$V_B = 0.5 V_{BO}\text{ max}$ (see Figure 1)			10	$\mu A$
$I_P$	Peak Current *	see Figure 3 (Gate)	0.3			A

\* Applicable to both forward and reverse directions.

\*\* Connected in parallel with the devices.

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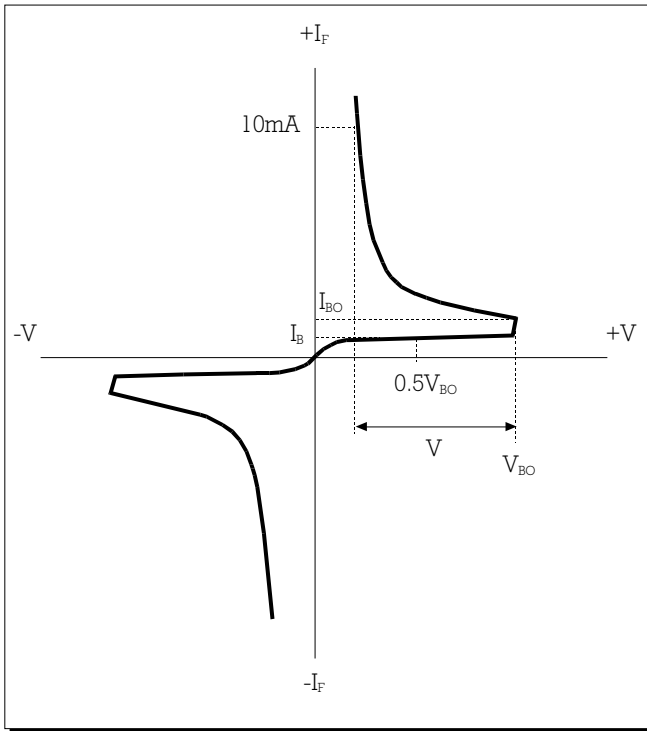


FIGURE 1: Current-Voltage Characteristics

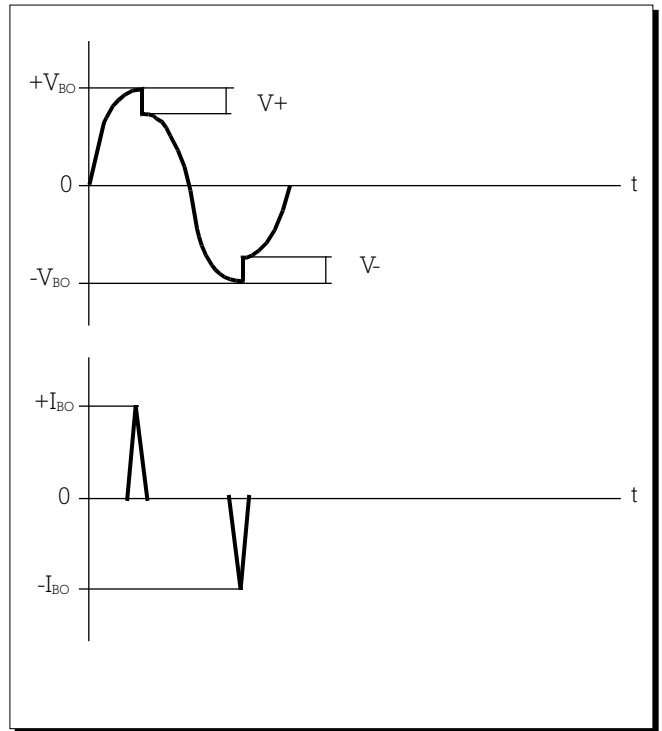


FIGURE 2

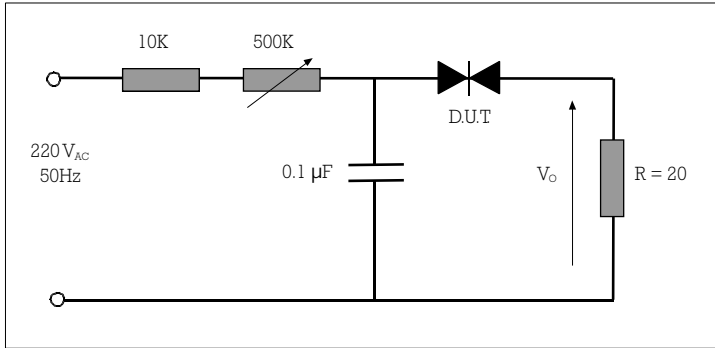


FIGURE 3: Test Circuit for Output Voltage.

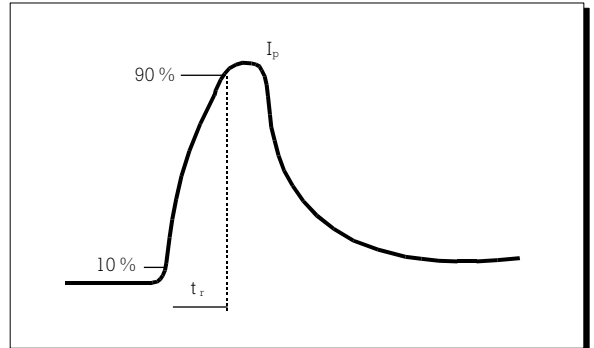


FIGURE 4: Test circuit see Figure 3. Adjust R for  $I_p = 0.5 A$

PART NUMBER INFORMATION

