

DIAC

<p>Dimensions in mm.</p> <p style="text-align: right;">DO-35 Glass Axial Package</p> <p>Mounting instructions</p> <ol style="list-style-type: none"> 1. Min. distance from body to soldering point, 4 mm. 2. Max. solder temperature, 250 °C. 3. Max. soldering time, 3.5 sec. 4. Do not bend lead at a point closer than 2 mm. to the body. 	<ul style="list-style-type: none"> • Silicon bi-directional trigger device intended for use in thyristor (SCR and TRIAC) trigger circuits, energy saving lighting circuits and other switching functions. <table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">BREAKOVER VOLTAGE</td> <td style="text-align: center;">ON-STATE CURRENT</td> </tr> <tr> <td style="text-align: center;">32 V</td> <td style="text-align: center;">2.0 Amps</td> </tr> </table> <p>SPECIAL FEATURES:</p> <ul style="list-style-type: none"> • Low breakover current: • Excellent symmetry. • Very low leakage current. 	BREAKOVER VOLTAGE	ON-STATE CURRENT	32 V	2.0 Amps
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32 V	2.0 Amps				

MARKING CODE

FD0200YR

Absolute Maximum Ratings, according to IEC publication No. 134

	PARAMETER	CONDITIONS	Min.	Typ.	Max.	Unit
P_{tot}	Total Power Dissipation	$T_a = 50^\circ\text{C}$			150	mW
I_{TRM}	Repetitive peak on-state current	$t_p = 20 \mu\text{s}, f = 100 \text{ Hz}$			2	A
T_{stg}	Storage Temperature Range		-40		+125	°C
T_j	Operating Junction Temperature		-40		+125	°C
T_{sld}	Soldering Temperature	$10 \leq \text{max.}$			260	°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 $T_{amb} = 25^\circ\text{C}$

	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)			± 3	V
$ \Delta V_{\pm} $	Dynamic breakover voltage *	$\Delta I = [I_{BO} \text{ to } I_F = 10 \text{ mA}]$ (see Figure 2)	5			V
V_O	Output Voltage *	(see Figure 3)	5			V
I_{BO}	Breakover Current *	$C = 22 \text{ nF}^{**}$			50	μA
t_r	Rise Time *	(see Figure 4)		1.5		μs
I_B	Leakage Current *	$V_B = 0.5 V_{BO} \text{ max}$ (see Figure 1)			10	μA
I_P	Peak Current *	see Figure 3 (Gate)	0.3			A

* Applicable to both forward and reverse

** Connected in parallel with the devices.



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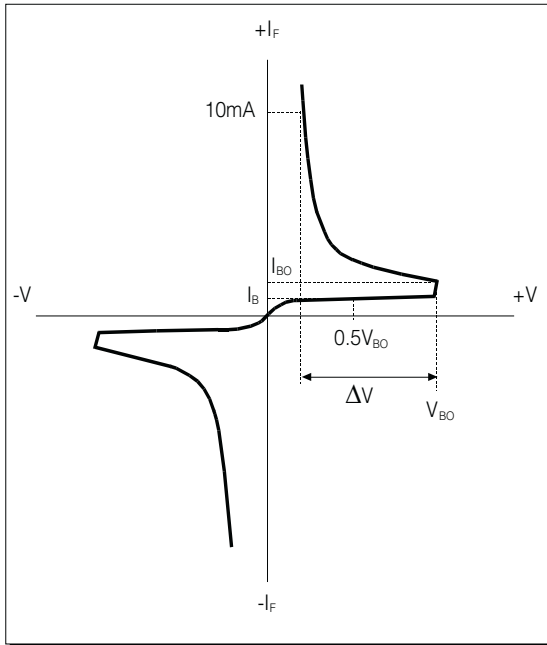


FIGURE 1: Current-Voltage Characteristics

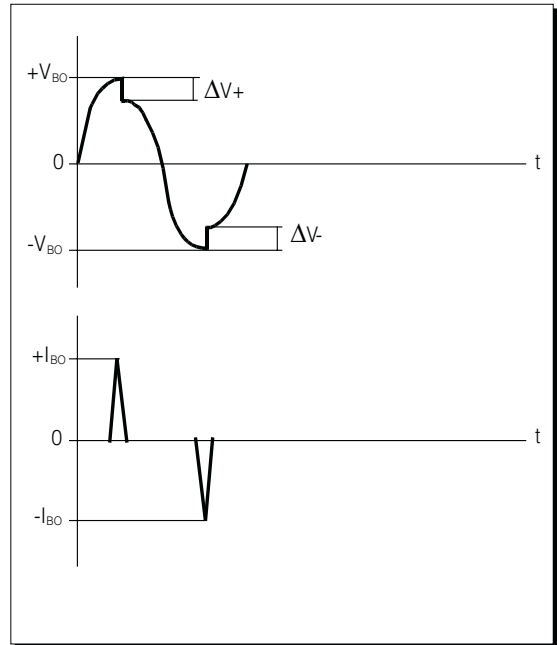


FIGURE 2

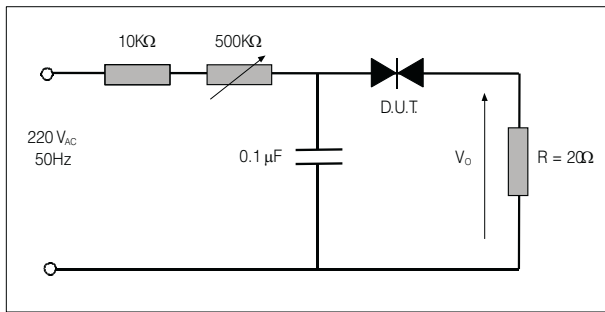


FIGURE 3: Test Circuit for Output Voltage.

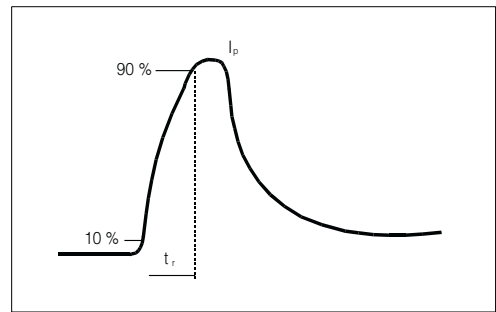


FIGURE 4: Test circuit see Figure 3. Adjust R for $I_p = 0.5 \text{ A}$

PART NUMBER INFORMATION

