

# Central<sup>TM</sup> Semiconductor Corp.

145 Adams Ave., Hauppauge, NY 11788 USA  
Phone (631) 435-1110 FAX (631) 435-1824

Manufacturers of World Class Discrete Semiconductors  
www.centralsemi.com

CT-32

DIAC

DO-35 CASE

## DESCRIPTION

The Central Semiconductor CT-32 Diac functions as a trigger diode with a fixed voltage reference and low breakover current. This device is manufactured in a hermetically sealed glass package to ensure high reliability.

## MAXIMUM RATINGS ( $T_A=25^\circ\text{C}$ )

	<u>SYMBOL</u>		<u>UNITS</u>
Repetitive Peak On-state Current $t_p=20\mu\text{s}$ , $f=120\text{Hz}$	$I_{TRM}$	2.0	A
Operating and Storage Junction Temperature	$T_J, T_{stg}$	-40 to +125	$^\circ\text{C}$

## ELECTRICAL CHARACTERISTICS ( $T_A=25^\circ\text{C}$ )

<u>SYMBOL</u>	<u>TEST CONDITIONS</u>	<u>MIN</u>	<u>MAX</u>	<u>UNITS</u>
$V_{BO}^*$	$C=22\text{nF}^{**}$	28	36	V
$ V_{BO1} - V_{BO2} $	$C=22\text{nF}^{**}$		3.0	V
$\Delta V$	$V_{BO}$ & $V_F$ @ 10mA	5.0		V
$V_O$	See Figure 2	5.0		V
$I_{BO}$	$C=22\text{nF}^{**}$		50	$\mu\text{A}$
$I_R$	$V_R = 18\text{V}$		10	$\mu\text{A}$
$I_P$	See Figure 2		0.3	A
$t_r$	See Figure 3		2.0	$\mu\text{s}$

\* Both directions.

\*\*Capacitor connected in parallel with device.

(SEE REVERSE SIDE)

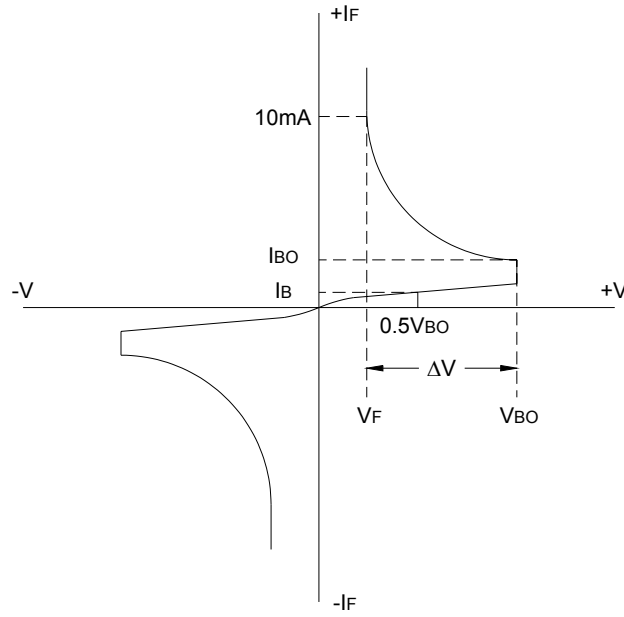


Figure 1. Voltage – Current characteristic curve.

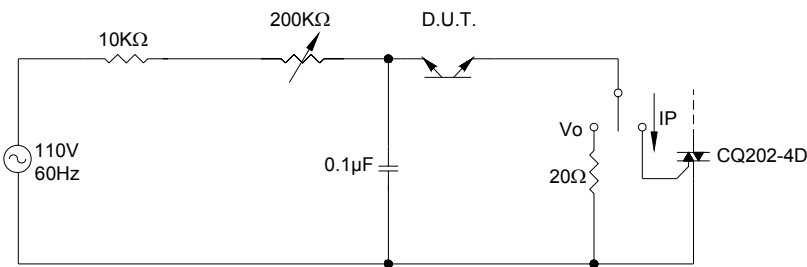


Figure 2. Test circuit.

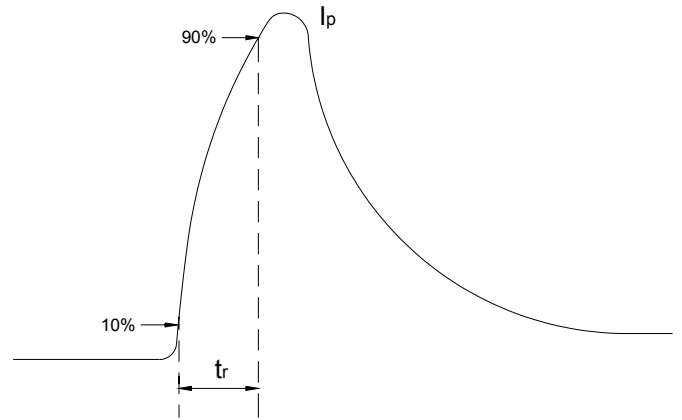
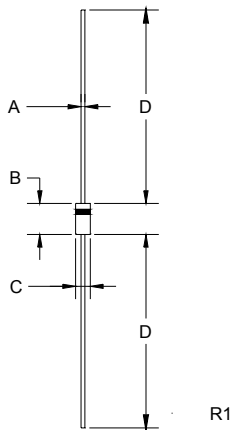


Figure 3. Rise time measurement.

**DO-35 PACKAGE - MECHANICAL OUTLINE**



SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.018	0.022	0.46	0.56
B	0.120	0.200	3.05	5.08
C	0.060	0.090	1.52	2.29
D	1.000	-	25.40	-

DO-35 (REV: R1)

**Central**<sup>TM</sup>  
**Semiconductor Corp.**

145 Adams Ave., Hauppauge, NY 11788 USA  
Phone (631) 435-1110 FAX (631) 435-1824

Manufacturers of World Class Discrete Semiconductors  
www.centralsemi.com