

CentralTM Semiconductor Corp.

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Manufacturers of World Class Discrete Semiconductors
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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
ΔV	V_{BO} & V_F @ 10mA	5.0		V
V_O	See Figure 2	5.0		V
I_{BO}	$C=22\text{nF}^{**}$		50	μA
I_R	$V_R = 18\text{V}$		10	μA
I_P	See Figure 2		0.3	A
t_r	See Figure 3		2.0	μs

* Both directions.

**Capacitor connected in parallel with device.

(SEE REVERSE SIDE)

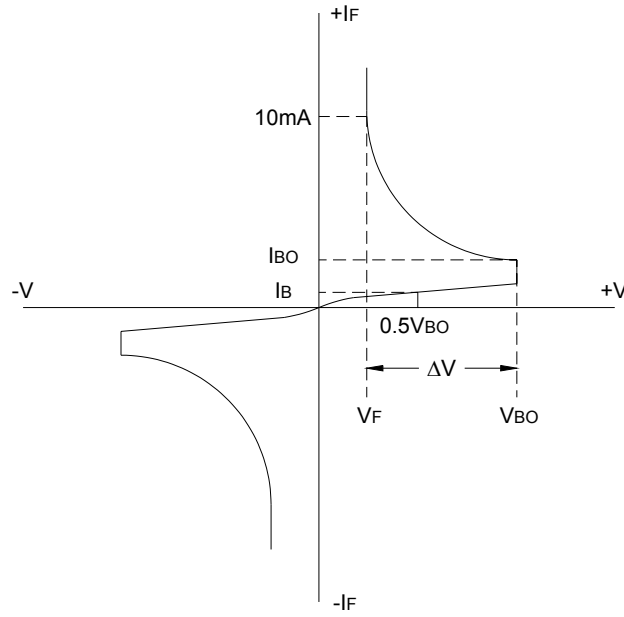


Figure 1. Voltage – Current characteristic curve.

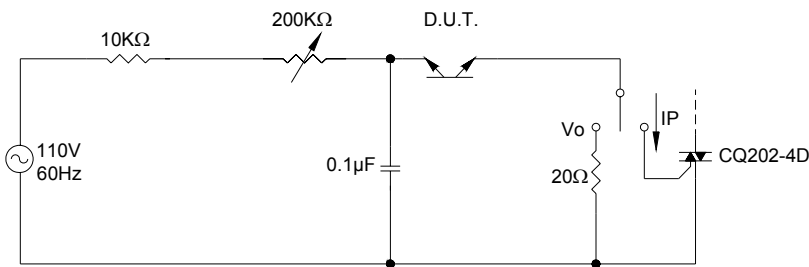


Figure 2. Test circuit.

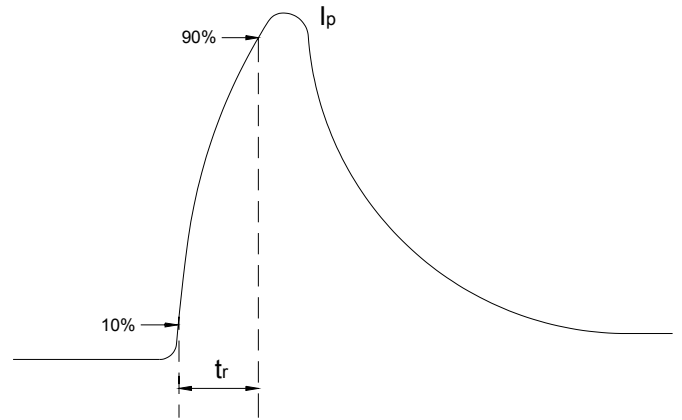
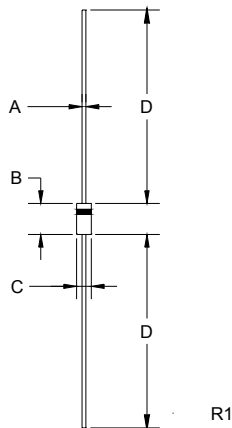


Figure 3. Rise time measurement.

DO-35 PACKAGE - MECHANICAL OUTLINE



DIMENSIONS				
SYMBOL	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)

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