

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

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Manufacturers of World Class Discrete Semiconductors  
[www.centrasemi.com](http://www.centrasemi.com)

BAV45

SILICON PICOAMPERE DIODE

TO-18 CASE (TWO LEADED)

## DESCRIPTION

The CENTRAL SEMICONDUCTOR BAV45 type is a Silicon Picoampere Diode, mounted in a hermetically sealed metal case, designed for extremely low leakage applications.

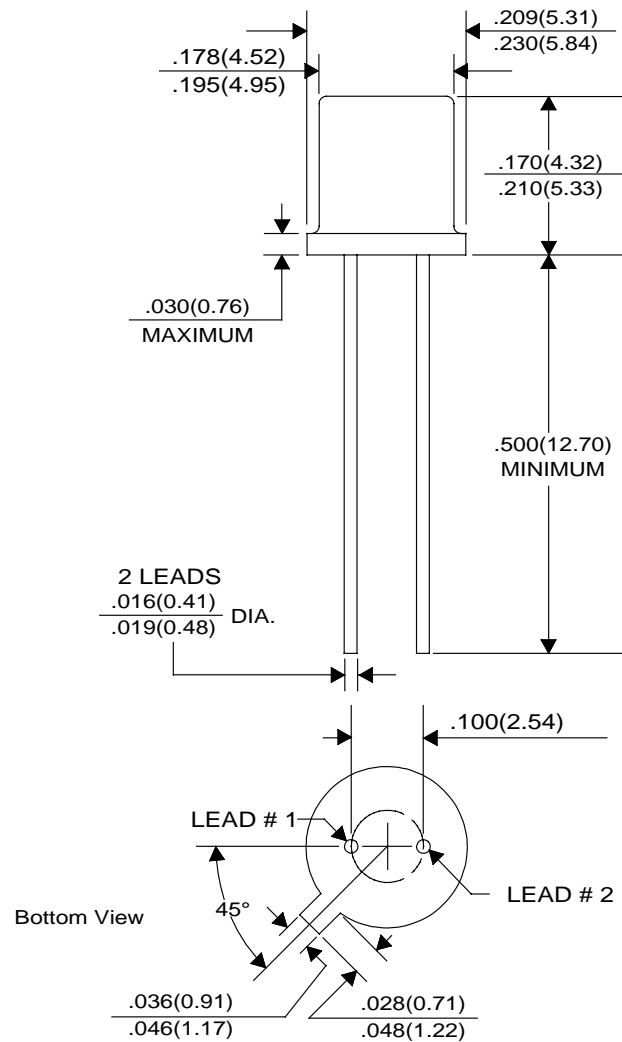
## MAXIMUM RATINGS ( $T_A=25^\circ\text{C}$ )

	<u>SYMBOL</u>		<u>UNITS</u>
Peak Repetitive Reverse Voltage	$V_{RRM}$	35	V
Continuous Reverse Voltage	$V_R$	20	V
Forward Current	$I_F$	50	mA
Peak Repetitive Forward Current	$I_{FRM}$	100	mA
Operating and Storage			
Junction Temperature	$T_J, T_{stg}$	-65 to +125	$^\circ\text{C}$
Thermal Resistance	$\Theta_{JA}$	500	$^\circ\text{C/W}$

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

<u>SYMBOL</u>	<u>TEST CONDITIONS</u>	<u>MIN</u>	<u>MAX</u>	<u>UNITS</u>
$I_R$	$V_R=5.0\text{V}$		5.0	pA
$I_R$	$V_R=5.0\text{V}, T_A=80^\circ\text{C}$		250	pA
$I_R$	$V_R=20\text{V}$		10	pA
$V_F$	$I_F=10\text{mA}$		1.0	V
$C_d$	$V_R=0\text{V}, f=1.0\text{MHz}$		1.3	pF
$V_{fr}$	$I_F=10\text{mA}$		1.25	V
$t_{rr}$	$I_F=I_R=10\text{mA}, I_{rr}=1.0\text{mA}, R_L=100\Omega$		600	ns

(SEE REVERSE SIDE)

TO-18 CASE (TWO LEADED) - MECHANICAL OUTLINE

All Dimension in Inches (mm).

Lead Code:

1. Anode
2. Cathode

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