

BAV45
SILICON
PICOAMPERE DIODE



TO-18 (2-LEAD) CASE



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR BAV45 is a silicon picoampere diode, mounted in a hermetically sealed metal case, designed for extremely low leakage applications.

MARKING: FULL PART NUMBER

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

Peak Repetitive Reverse Voltage
Continuous Reverse Voltage
Continuous Forward Current
Peak Repetitive Forward Current
Operating and Storage Junction Temperature
Thermal Resistance

SYMBOL

V_{RRM} 35
 V_R 20
 I_F 50
 I_{FRM} 100
 T_J, T_{stg} -65 to +125
 Θ_{JA} 500

UNITS

V
V
mA
mA
 $^{\circ}\text{C}$
 $^{\circ}\text{C/W}$

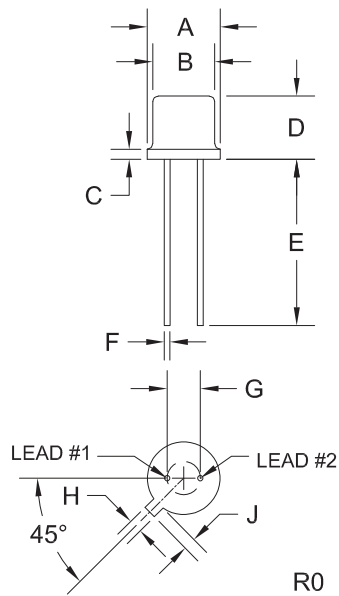
ELECTRICAL CHARACTERISTICS: ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
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_J	$V_R=0, f=1.0\text{MHz}$		1.3	pF
t_{rr}	$I_F=I_R=10\text{mA}, I_{rr}=1.0\text{mA}, R_L=100\Omega$		600	ns

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TO-18 (2-LEAD) CASE - MECHANICAL OUTLINE



SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A (DIA)	0.209	0.230	5.31	5.84
B (DIA)	0.178	0.195	4.52	4.95
C	-	0.030	-	0.76
D	0.170	0.210	4.32	5.33
E	0.500	-	12.70	-
F (DIA)	0.016	0.019	0.41	0.48
G (DIA)	0.100		2.54	
H	0.036	0.046	0.91	1.17
J	0.028	0.048	0.71	1.22

TO-18 (2 LEAD) (REV: R0)

LEAD CODE:

- 1) Anode
- 2) Cathode

MARKING: FULL PART NUMBER

R1 (1-May 2013)