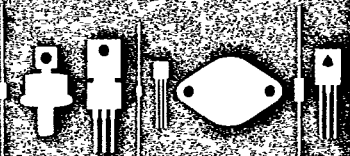


Semiconductor Corp.  
**Central Semiconductor Corp.**  
**Central Semiconductor Corp.**  
**Central Semiconductor Corp.**

145 Adams Avenue  
 Hauppauge, New York 11788



MJ12010

D

NPN SILICON TRANSISTOR

JEDEC TO-3 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR MJ12010 type is a Silicon NPN Power Transistor mounted in a hermetically sealed metal case designed for Horizontal Deflection Circuits.

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

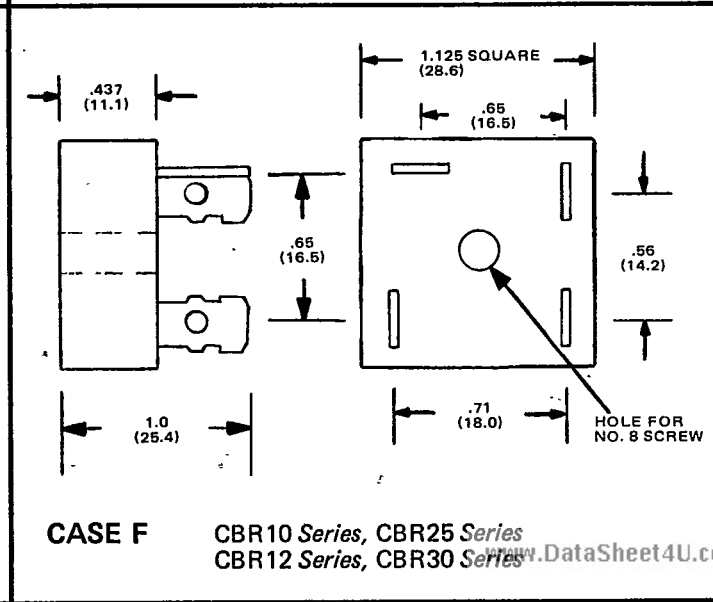
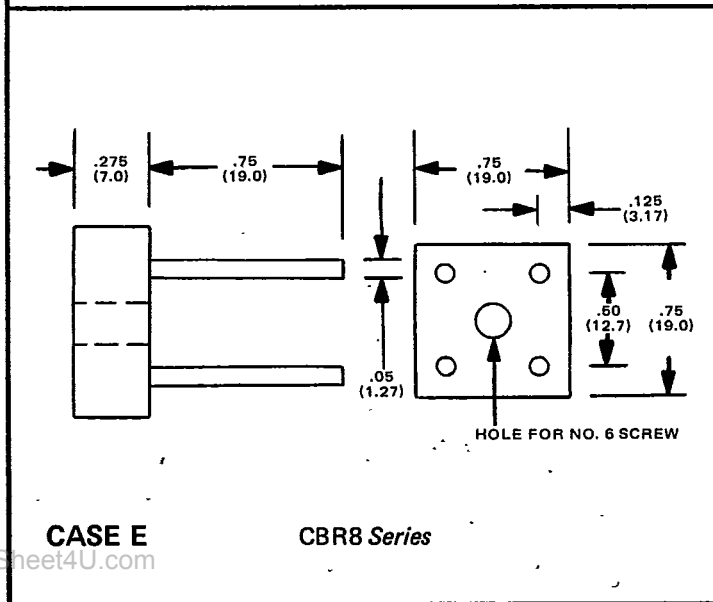
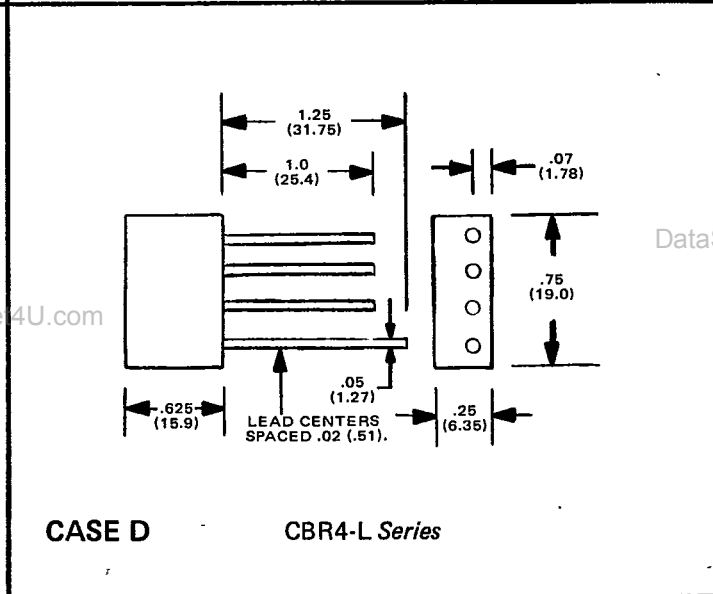
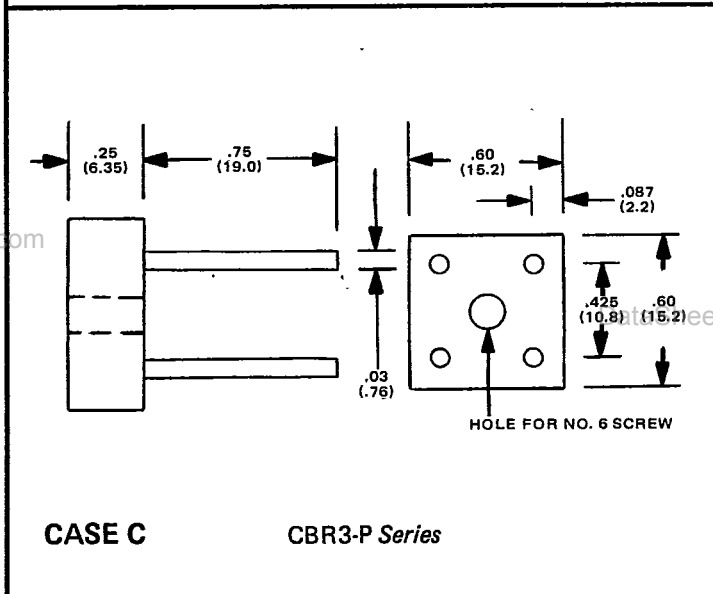
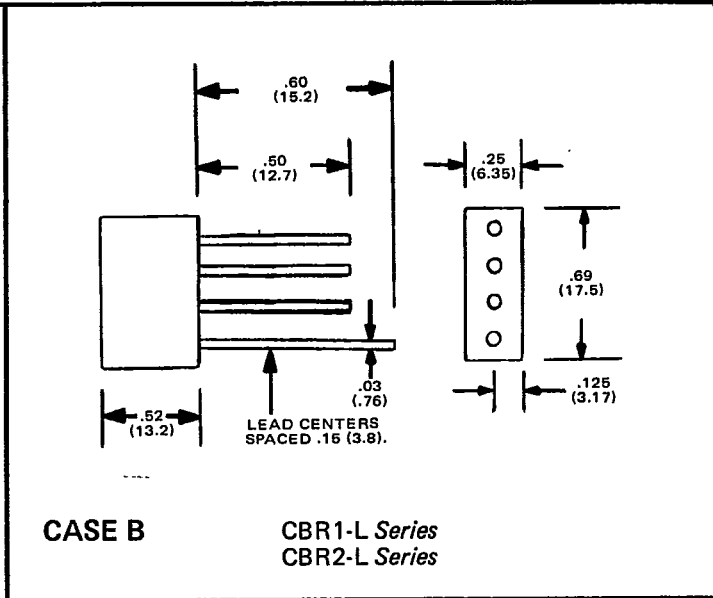
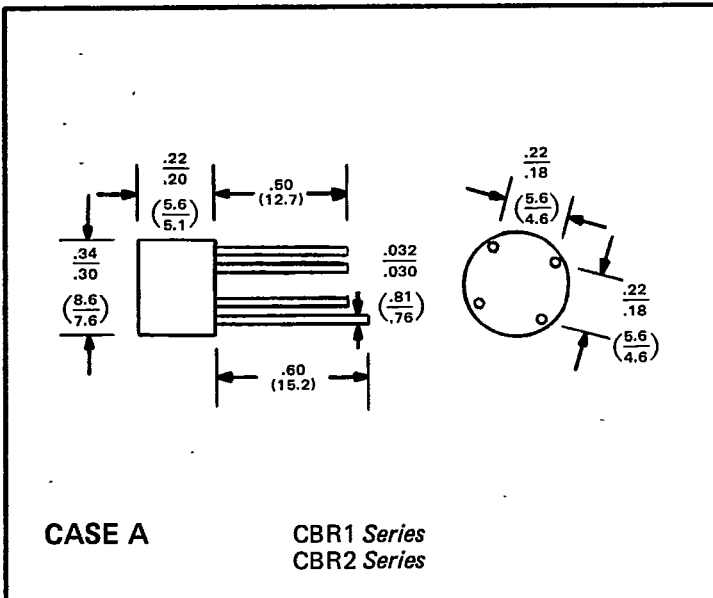
Collector-Emitter Voltage	$V_{CE}$	950	V
Collector-Emitter Voltage	$V_{CEO}$	400	V
Emitter-Base Voltage	$V_{EBO}$	5.0	V
Collector Current	$I_C$	10	A
Emitter Current	$I_E$	15	A
Base Current	$I_B$	5.0	A
Power Dissipation	$P_D$	100	W
Operating and Storage			
Junction Temperature	$T_J, T_{stg}$	-65 TO +150	$^\circ\text{C}$
Thermal Resistance	$\theta_{JC}$	1.25	$^\circ\text{C/W}$

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
$I_{CES}$	$V_{CE}=950\text{V}$		1.0	mA
$I_{EBO}$	$V_{BE}=5.0\text{V}$		1.0	mA
$BV_{CEO}$	$I_C=50\text{mA}$	400		V
$V_{CE(SAT)}$	$I_C=5.0\text{A}, I_B=1.2\text{A}$		5.0	V
$V_{BE(SAT)}$	$I_C=5.0\text{A}, I_B=1.2\text{A}$		1.5	V
$f_T$	$V_{CE}=5.0\text{V}, I_C=0.1\text{A}, f=1.0\text{MHz}$		10TYP	MHz
$C_{ob}$	$V_{CB}=10\text{V}, I_E=0, f=0.1\text{MHz}$		160TYP	pF
$t_f$	$I_C=5.0\text{A}, I_{B1}=1.2\text{A}, L_B=8.0\mu\text{H}$		1.0	$\mu\text{s}$
$I_{s/b}$	$V_{CE}=40\text{V}, t=1.0\text{s}$	2.5		A

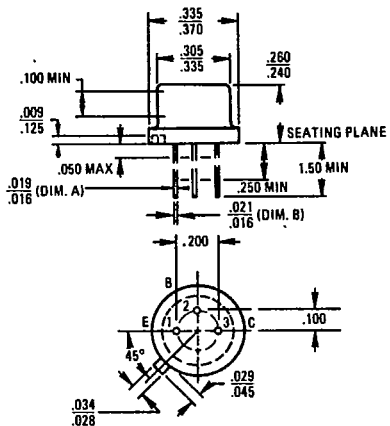
# CASE OUTLINE DRAWINGS

D

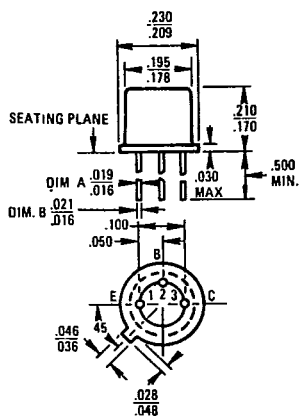


All Dimensions in Inches (Millimeters)  
Drawings Not To Scale

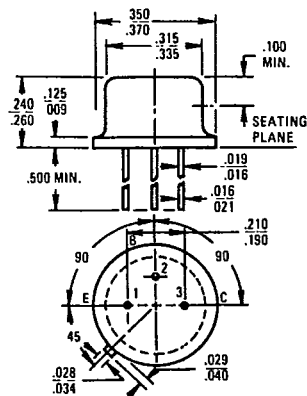
TO-5



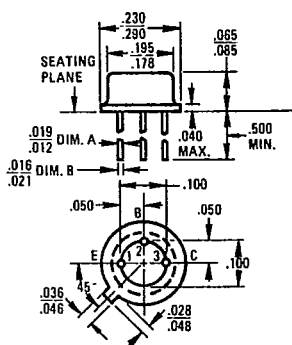
TO-18



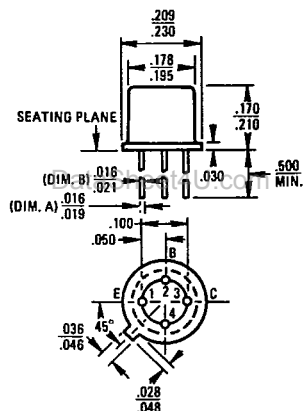
TO-39



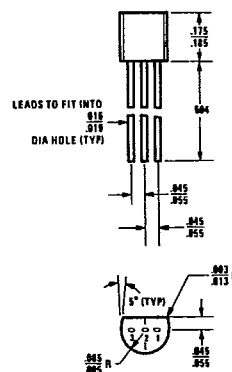
TO-46



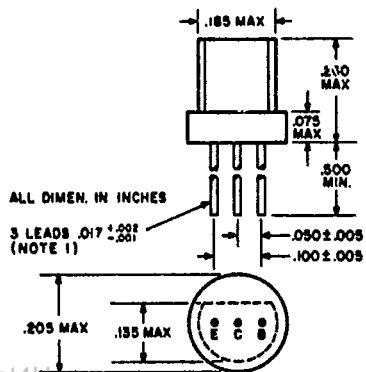
TO-72



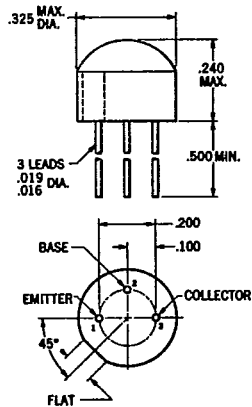
TO-92



TO-98



TO-105



TO-106

