

CentralTM Semiconductor Corp.

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Manufacturers of World Class Discrete Semiconductors

2N3634
2N3635

PNP SILICON TRANSISTOR

JEDEC TO-39 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N3634 and 2N3635 types are Silicon PNP Epitaxial Planar Transistors designed for general purpose switching and amplifier applications.

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

	<u>SYMBOL</u>		<u>UNITS</u>
Collector-Base Voltage	V_{CBO}	140	V
Collector-Emitter Voltage	V_{CEO}	140	V
Emitter-Base Voltage	V_{EBO}	5.0	V
Collector Current	I_C	1.0	A
Power Dissipation	P_D	1.0	W
Power Dissipation ($T_C=25^\circ\text{C}$)	P_D	5.0	W
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +200	$^\circ\text{C}$
Thermal Resistance	Θ_{JA}	175	$^\circ\text{C/W}$
Thermal Resistance	Θ_{JC}	35	$^\circ\text{C/W}$

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_{CBO}	$V_{CB}=100\text{V}$		100	nA
I_{EBO}	$V_{EB}=3.0\text{V}$		50	nA
BV_{CBO}	$I_C=100\mu\text{A}$	140		V
BV_{CEO}	$I_C=10\text{mA}$	140		V
BV_{EBO}	$I_E=10\mu\text{A}$	5.0		V
$V_{CE(SAT)}$	$I_C=10\text{mA}, I_B=1.0\text{mA}$		0.3	V
$V_{CE(SAT)}$	$I_C=50\text{mA}, I_B=5.0\text{mA}$		0.5	V
$V_{BE(SAT)}$	$I_C=10\text{mA}, I_B=1.0\text{mA}$		0.8	V
$V_{BE(SAT)}$	$I_C=50\text{mA}, I_B=5.0\text{mA}$	0.65	0.9	V

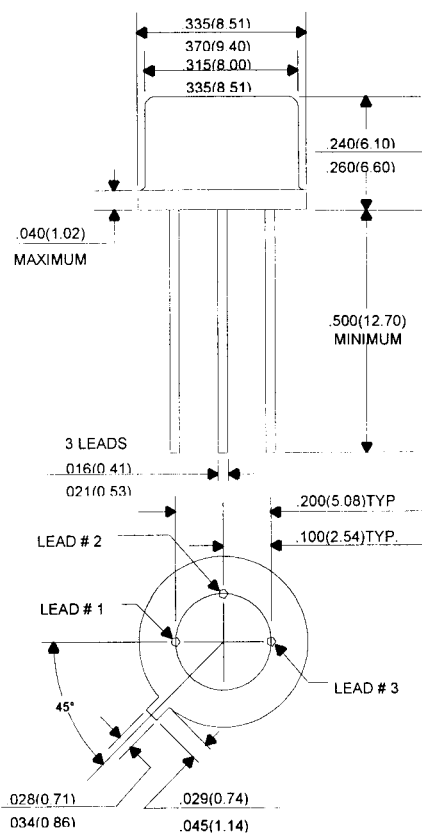
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ELECTRICAL CHARACTERISTICS (Continued)

SYMBOL	TEST CONDITIONS	2N3634		2N3635		UNITS
		MIN	MAX	MIN	MAX	
h_{FE}	$V_{CE}=10V, I_C=0.1mA$	40		80		
h_{FE}	$V_{CE}=10V, I_C=1.0mA$	45		90		
h_{FE}	$V_{CE}=10V, I_C=10mA$	50		100		
h_{FE}	$V_{CE}=10V, I_C=50mA$	50	150	100	300	
h_{FE}	$V_{CE}=10V, I_C=150mA$	25		50		
f_T	$V_{CE}=30V, I_C=30mA, f=100MHz$	150		200		MHz
C_{obo}	$V_{CB}=20V, I_E=0, f=1.0MHz$		10		10	pF
C_{ibo}	$V_{EB}=1.0V, I_C=0, f=1.0MHz$		75		75	pF
NF	$V_{CE}=10V, I_C=0.5mA, R_S=1.0k\Omega, f=1.0kHz$		3.0		3.0	dB
t_{on}	$V_{CC}=100V, V_{BE}=4.0V, I_C=50mA, I_{B1}=I_{B2}=5mA$		400		400	ns
t_{off}	$V_{CC}=100V, V_{BE}=4.0V, I_C=50mA, I_{B1}=I_{B2}=5mA$		600		600	ns

JEDEC TO-39 CASE - MECHANICAL OUTLINE

All Dimensions in Inches (mm).



Lead Code:

- 1) Emitter
- 2) Base
- 3) Collector

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