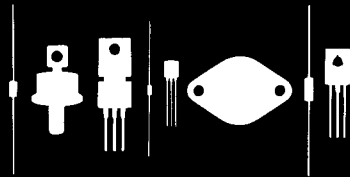


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145 Adams Avenue  
Hauppauge, New York 11788



PN3565

NPN SILICON TRANSISTOR

JEDEC TO-92 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR PN3565 type is a Silicon NPN Epitaxial Planar Transistor designed for low noise applications.

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

	SYMBOL		UNIT
Collector-Base Voltage	$V_{CB0}$	30	V
Collector-Emitter Voltage	$V_{CEO}$	25	V
Emitter-Base Voltage	$V_{EBO}$	6.0	V
Collector Current	$I_C$	50	nA
Power Dissipation	$P_D$	625	mW
Operating and Storage Temperature	$T_J, T_{stg}$	-65 TO +150	$^\circ\text{C}$

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
$I_{CB0}$	$V_{CB}=25\text{V}$		50	nA
$I_{CBO}$	$V_{CB}=25\text{V}, T_A=65^\circ\text{C}$		3.0	$\mu\text{A}$
$BV_{CB0}$	$I_C=100\mu\text{A}$	30		V
$BV_{CEO}$	$I_C=2.0\text{mA}$	25		V
$BV_{EBO}$	$I_E=10\mu\text{A}$	6.0		V
$V_{CE(SAT)}$	$I_C=1.0\text{mA}, I_B=0.1\text{mA}$		0.35	V
$h_{FE}$	$V_{CE}=10\text{V}, I_C=100\mu\text{A}$	70		
$h_{FE}$	$V_{CE}=10\text{V}, I_C=1.0\text{mA}$	150	600	
$h_{fe}$	$V_{CE}=5.0\text{V}, I_C=1.0\text{mA}, f=1.0\text{kHz}$	120	750	
$f_T$	$V_{CE}=5.0\text{V}, I_C=1.0\text{mA}, f=20\text{MHz}$	40	240	MHz
$h_{ie}$	$V_{CE}=5.0\text{V}, I_C=1.0\text{mA}, f=1.0\text{kHz}$	2.0	20	$k\Omega$
$h_{oe}$	$V_{CE}=5.0\text{V}, I_C=1.0\text{mA}, f=1.0\text{kHz}$	0.5	100	$\mu\text{hos}$
$C_{ob}$	$V_{CB}=5.0\text{V}, I_E=0, f=140\text{kHz}$		4.0	pF

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