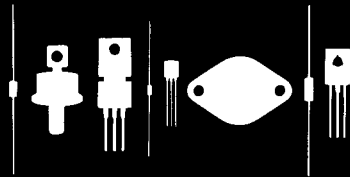


Central
Semiconductor Corp.
Central
Semiconductor Corp.
Central
Semiconductor Corp.
CentralTM
Semiconductor Corp.

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 | μA |
| 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 | $\text{k}\Omega$ |
| h_{oe} | $V_{CE}=5.0\text{V}, I_C=1.0\text{mA}, f=1.0\text{kHz}$ | 0.5 | 100 | μhos |
| C_{ob} | $V_{CB}=5.0\text{V}, I_E=0, f=140\text{kHz}$ | | 4.0 | pF |

CentralTM
Semiconductor Corp.

145 Adams Avenue
Hauppauge, NY 11788 USA
Tel: (631) 435-1110 • Fax: (631) 435-1824
www.centralsemi.com