

CentralTM Semiconductor Corp.

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Manufacturers of World Class Discrete Semiconductors

2N3567 PN3567
2N3568 PN3568
2N3569 PN3569

JEDEC TO-105 JEDEC TO-92 (EBC)

SILICON NPN TRANSISTORS

DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N3567, PN3567 Series types are Silicon NPN Small Signal Transistors designed for general purpose amplifier applications.

MAXIMUM RATINGS (T_A=25°C)

| | 2N3567 PN3567 | 2N3568 PN3568 | 2N3569 PN3569 | UNIT |
|---|-----------------------------------|------------------|------------------|------|
| Collector-Base Voltage | V _{CB0} | 80 | 80 | V |
| Collector-Emitter Voltage | V _{CEO} | 60 | 40 | V |
| Emitter-Base Voltage | V _{EB0} | 5.0 | 5.0 | V |
| Collector Current | I _C | 500 | 500 | mA |
| Base Current | I _B | 100 | 100 | mA |
| Power Dissipation, PN Types (TO-92 Case) | P _D | | 625 | mW |
| Power Dissipation, 2N Types (TO-105 Case) | P _D | | 350 | mW |
| Operating and Storage Junction Temperature | T _J , T _{stg} | -55 TO +150 | | °C |

ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

| SYMBOL | TEST CONDITIONS | 2N3567 PN3567 | | 2N3568 PN3568 | | 2N3569 PN3569 | | UNIT |
|----------------------|---|------------------|------|------------------|------|------------------|------|------|
| | | MIN | MAX | MIN | MAX | MIN | MAX | |
| I _{CB0} | V _{CB} =40V | | 50 | | 50 | | 50 | nA |
| I _{CB0} | V _{CB} =40V, T _A =75°C | | 5.0 | | 5.0 | | 5.0 | μA |
| I _{EBO} | V _{EB} =4.0V | | 25 | | 25 | | 25 | nA |
| BV _{CB0} | I _C =100μA | 80 | | 80 | | 80 | | V |
| BV _{CEO} | I _C =30mA | 40 | | 60 | | 40 | | V |
| BV _{EBO} | I _E =10μA | 5.0 | | 5.0 | | 5.0 | | V |
| V _{CE(SAT)} | I _C =150mA, I _B =15mA | | 0.25 | | 0.25 | | 0.25 | V |
| V _{BE(ON)} | V _{CE} =1.0V, I _C =150mA | | 1.1 | | 1.1 | | 1.1 | V |
| h _{FE} | V _{CE} =1.0V, I _C =30mA | 40 | | 40 | | 100 | | |
| h _{FE} | V _{CE} =1.0V, I _C =150mA | 40 | 120 | 40 | 120 | 100 | 300 | |
| C _{ob} | V _{CB} =10V, f=140kHz | | 20 | | 20 | | 20 | pF |
| C _{eb} | V _{EB} =0.5V, f=140kHz | | 80 | | 80 | | 80 | pF |
| f _T | V _{CE} =10V, I _C =50mA, f=20MHz | 60 | 600 | 60 | 600 | 60 | 600 | MHz |