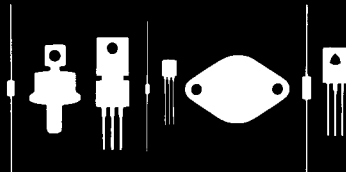


Central
Semiconductor Corp.

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145 Adams Avenue
Hauppauge, New York 11788



PN4916
PN4917

PNP SILICON TRANSISTOR

JEDEC TO-92 CASE (EBC)

DESCRIPTION

The CENTRAL SEMICONDUCTOR PN4916, PN4917 series types are epoxy molded silicon PNP small signal transistors manufactured by the epitaxial planar process for general purpose amplifier and switching applications.

MAXIMUM RATINGS (TA=25°C unless otherwise noted)

| | SYMBOL | | UNIT |
|--|----------|-------------|------|
| Collector-Base Voltage | VCBO | 30 | V |
| Collector-Emitter Voltage | VCEO | 30 | V |
| Emitter-Base Voltage | VEBO | 5.0 | V |
| Collector Current | IC | 100 | mA |
| Power Dissipation | PD | 625 | mW |
| Power Dissipation (TC=25°C) | PD | 1.5 | W |
| Operating and Storage Junction Temperature | TJ, TSTG | -65 TO +150 | °C |

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

| SYMBOL | TEST CONDITIONS | PN4916 | | PN4917 | | UNIT |
|-------------------------------|---|--------|------|--------|------|------|
| | | MIN | MAX | MIN | MAX | |
| ICES | VCE=15V | | 25 | | 25 | nA |
| ICES | VCE=15V, TA=65°C | | 25 | | 25 | µA |
| BVCBO | IC=10µA | 30 | | 30 | | V |
| BVCES | IC=10µA | 30 | | 30 | | V |
| BVCEO | IC=10mA | 30 | | 30 | | V |
| BVEBO | IE=10µA | 5.0 | | 5.0 | | V |
| VCE(SAT) | IC=1.0mA, IB=0.1mA | | 0.13 | | 0.13 | V |
| VCE(SAT) | IC=10mA, IB=1.0mA | | 0.14 | | 0.14 | V |
| VCE(SAT) | IC=50mA, IB=5.0mA | | 0.3 | | 0.3 | V |
| VBE(SAT) | IC=1.0mA, IB=0.1mA | | 0.75 | | 0.75 | V |
| VBE(SAT) | IC=10mA, IB=1.0mA | 0.7 | 0.9 | 0.7 | 0.9 | V |
| VBE(SAT) | IC=50mA, IB=5.0mA | 0.75 | 1.1 | 0.75 | 1.1 | V |
| hFE | VCE=1.0V, IC=100µA | 40 | - | 100 | - | |
| hFE | VCE=1.0V, IC=1.0mA | 60 | - | 150 | - | |
| hFE | VCE=1.0V, IC=10mA | 70 | 200 | 150 | 300 | |
| hFE | VCE=1.0V, IC=50mA | 15 | - | 30 | - | |
| fT | VCE=20V, IC=10mA, f=100MHz | 400 | | 450 | | MHz |
| Cob | VCE=10V, IE=0, | | 4.5 | | 4.5 | pF |
| Cib | VEB=0.5V, IC=0, | | 8.0 | | 8.0 | pF |
| ton | IC=50mA, IB1=5.0mA | | 40 | | 40 | ns |
| t _{off} | IC=50mA, IB1=5.0mA, IB2=5.0mA | | 150 | | 150 | ns |
| tr _{b⁺Cc} | VCE=20V, IC=10mA, f=80MHz | | 50 | | 50 | ps |
| NF | VCE=5.0V, IC=1.0mA, RS=100Ω, BW=15MHz, f=100MHz | | 6.0 | | 6.0 | dB |
| NF | VCE=5.0V, IC=100µA, RS=1.0kΩ, BW=15.7kHz, 3.0 dB Points @ 10Hz and 10kHz | | 4.0 | | 4.0 | dB |