



MPS2907A

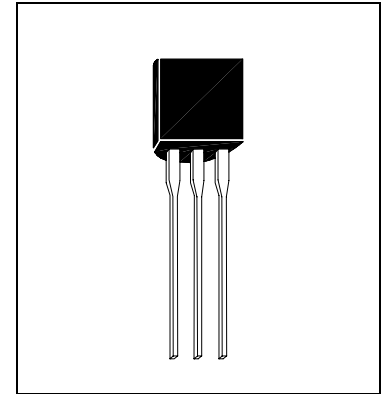
PNP EPITAXIAL PLANAR TRANSISTOR

Description

The MPS2907A is designed for general purpose amplifier and high speed, medium-power switching applications.

Features

- Low Collector Saturation voltage.
- High Speed Switching.
- For Complementary Use with NPN Type MPS2222A.



Absolute Maximum Ratings

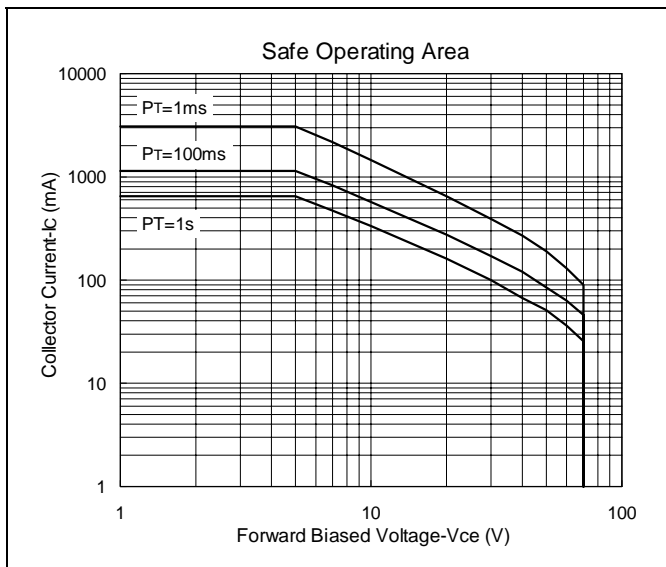
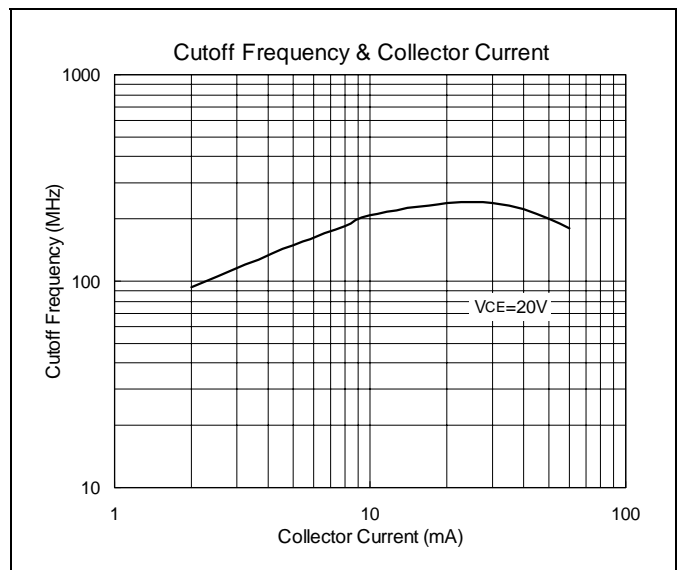
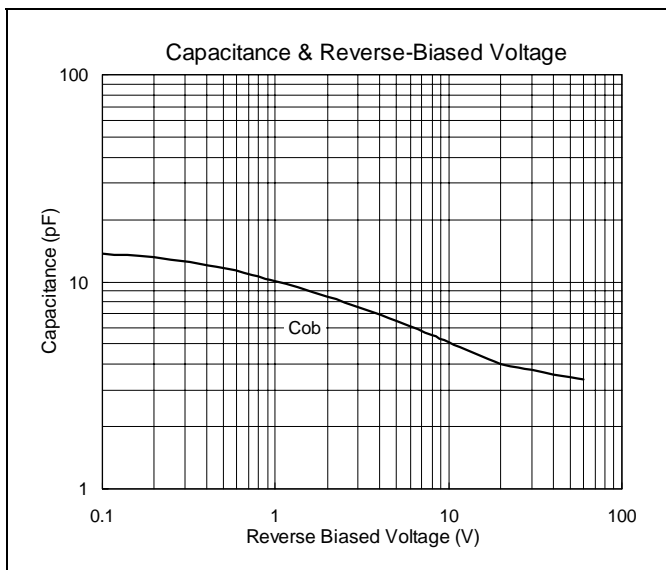
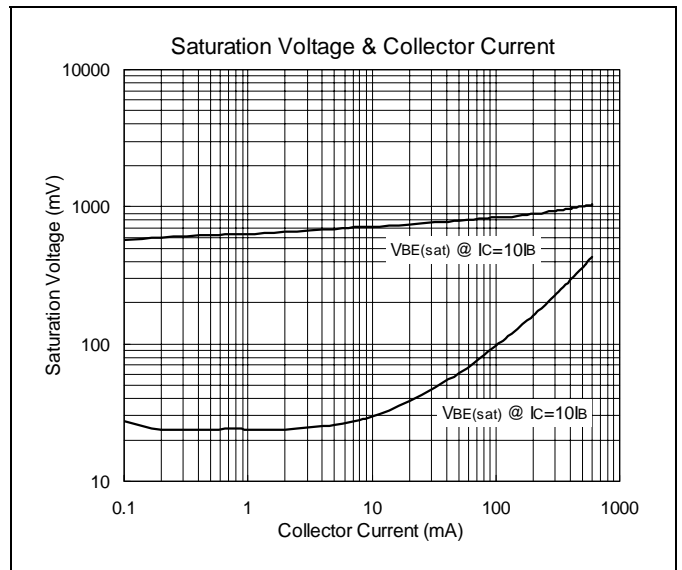
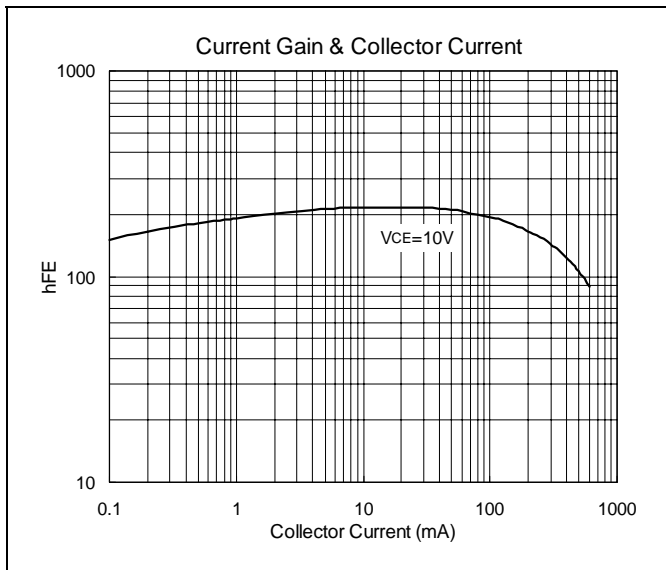
- Maximum Temperatures
 - Storage Temperature -55~+150°C
 - Junction Temperature 150 Maximum
- Maximum Power Dissipation
 - Total Power Dissipation (Ta=25°C)..... 625 mW
- Maximum Voltages and Currents (Ta=25°C)
 - VCBO Collector to Base Voltage 60 V
 - VCEO Collector to Emitter Voltage 60 V
 - VEBO Emitter to Base Voltage 5 V
 - IC Collector Current 600 mA

Characteristics (Ta=25°C)

| Symbol | Min. | Typ. | Max. | Unit | Test Conditions |
|-----------|------|------|------|------|----------------------------|
| BVCBO | 60 | - | - | V | IC=10uA, IE=0 |
| BVCEO | 60 | - | - | V | IC=10mA, IB=0 |
| BVEBO | 5 | - | - | V | IC=10uA, IC=0 |
| ICBO | - | - | 10 | nA | VCB=50V, IC=0 |
| ICEX | - | - | 50 | nA | VCE=30V, VBE=0.5V |
| VCE(sat)1 | - | 0.2 | 0.4 | V | IC=150mA, IB=15mA |
| VCE(sat)2 | - | 0.5 | 1.6 | V | IC=500mA, IB=50mA |
| VBE(sat)1 | - | - | 1.3 | V | IC=150mA, IB=15mA |
| VBE(sat)2 | - | - | 2.6 | V | IC=500mA, IB=50mA |
| hFE1 | 75 | - | - | | VCE=10V, IC=100uA |
| hFE2 | 100 | - | - | | VCE=10V, IC=1mA |
| hFE3 | 100 | - | - | | VCE=10V, IC=10mA |
| hFE4 | 100 | 180 | 300 | | VCE=10V, IC=150mA |
| hFE5 | 50 | - | - | | VCE=10V, IC=500mA |
| fT | 200 | - | - | MHz | VCE=20V, IC=50mA, f=100MHz |
| Cob | - | - | 8 | pF | VCB=10V, F=1MHz |

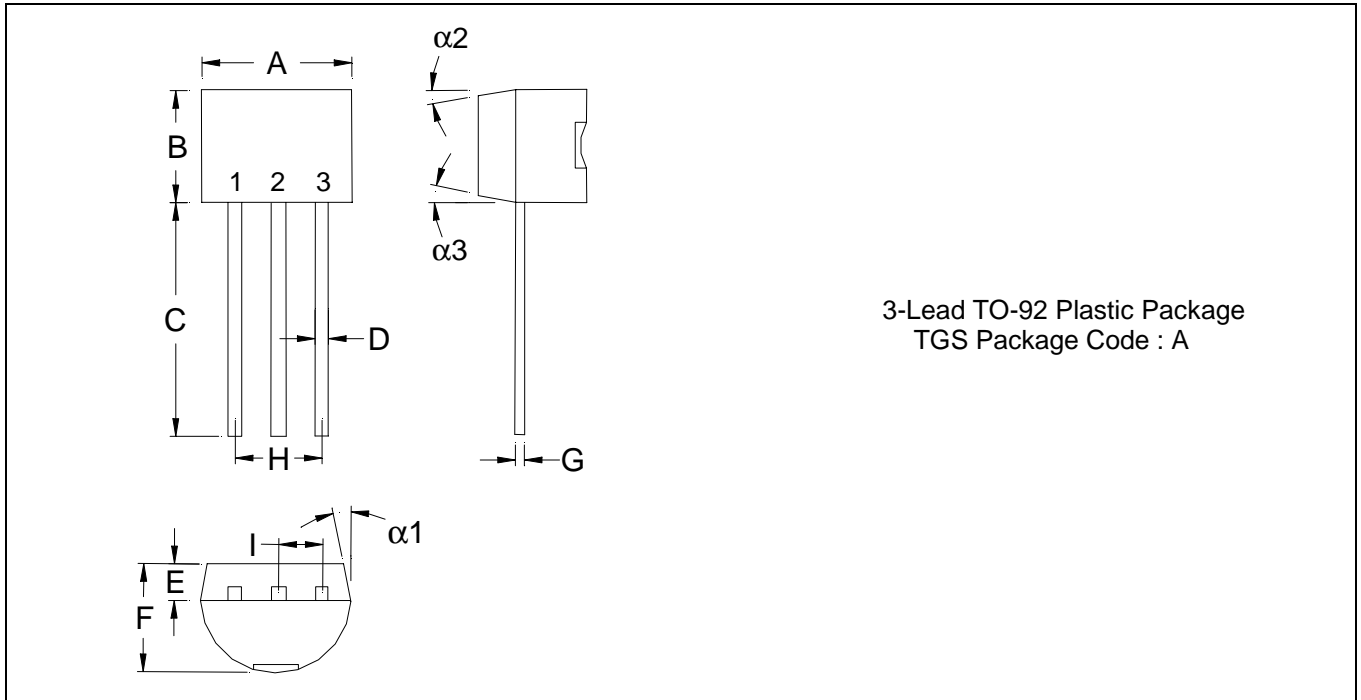


Characteristics Curve





TO-92 Dimension



*:Typical

| DIM | Inches | | Millimeters | | DIM | Inches | | Millimeters | |
|-----|--------|---------|-------------|-------|------------|--------|---------|-------------|-------|
| | Min. | Max. | Min. | Max. | | Min. | Max. | Min. | Max. |
| A | 0.1704 | 0.1902 | 4.33 | 4.83 | G | 0.0142 | 0.0220 | 0.36 | 0.56 |
| B | 0.1704 | 0.1902 | 4.33 | 4.83 | H | - | *0.1000 | - | *2.54 |
| C | 0.5000 | - | 12.70 | - | I | - | *0.0500 | - | *1.27 |
| D | 0.0142 | 0.0220 | 0.36 | 0.56 | $\alpha 1$ | - | *5° | - | *5° |
| E | - | *0.0500 | - | *1.27 | $\alpha 2$ | - | *2° | - | *2° |
| F | 0.1323 | 0.1480 | 3.36 | 3.76 | $\alpha 3$ | - | *2° | - | *2° |