



## S9015

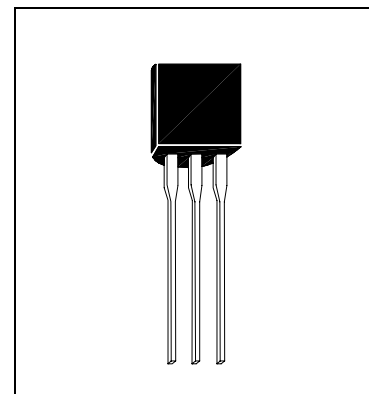
PNP EPITAXIAL PLANAR TRANSISTOR

### Description

The S9015 is designed for use in pre-amplifier of low level and low noise.

### Features

- High Total Power Dissipation. (PD:450mW)
- Complementary to S9014
- High hFE and Good Linearity.



### Absolute Maximum Ratings

- Maximum Temperatures  
Storage Temperature ..... -55~+150°C  
Junction Temperature ..... +150°C Maximum
- Maximum Power Dissipation  
Total Power Dissipation (Ta=25°C) ..... 450 mW
- Maximum Voltages and Currents (Ta=25°C)  
VCBO Collector to Base Voltage ..... 50 V  
VCEO Collector to Emitter Voltage ..... 45 V  
VEBO Emitter to Base Voltage ..... 5 V  
IC Collector Current ..... 100 mA

### Characteristics (Ta=25°C)

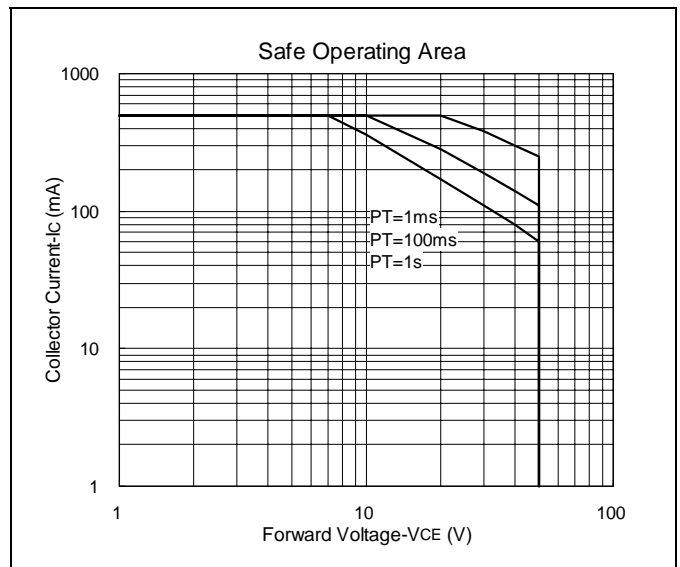
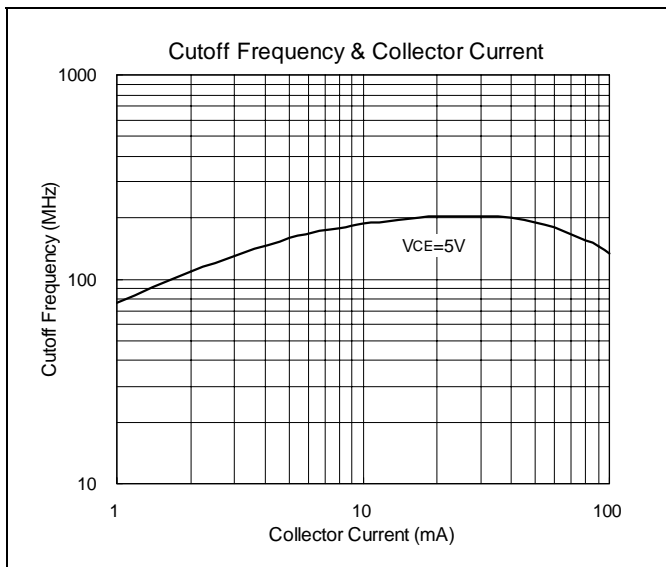
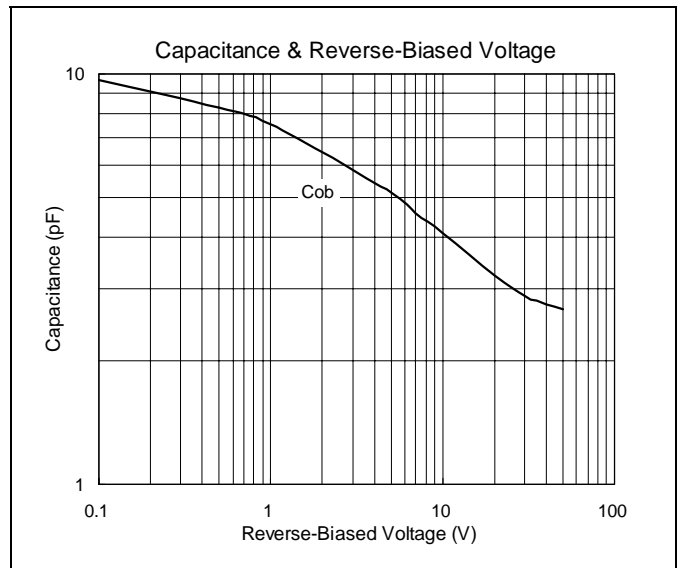
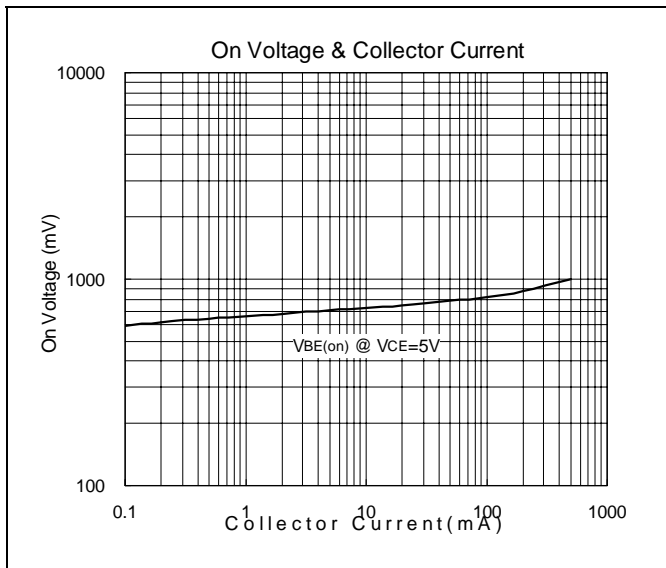
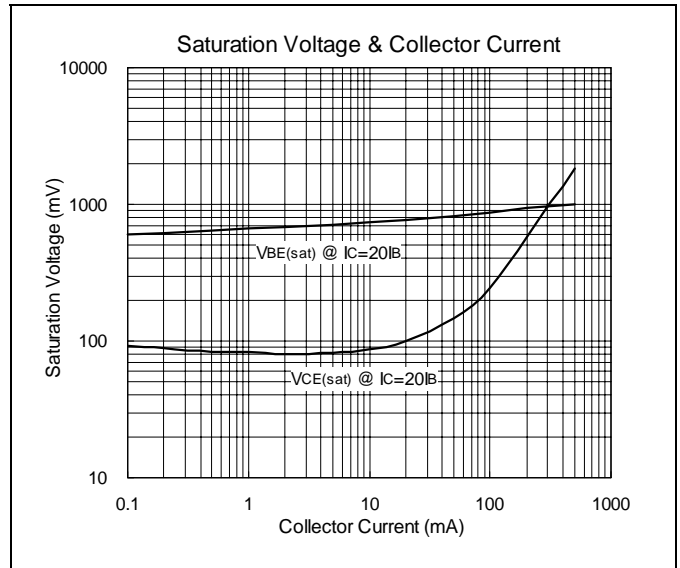
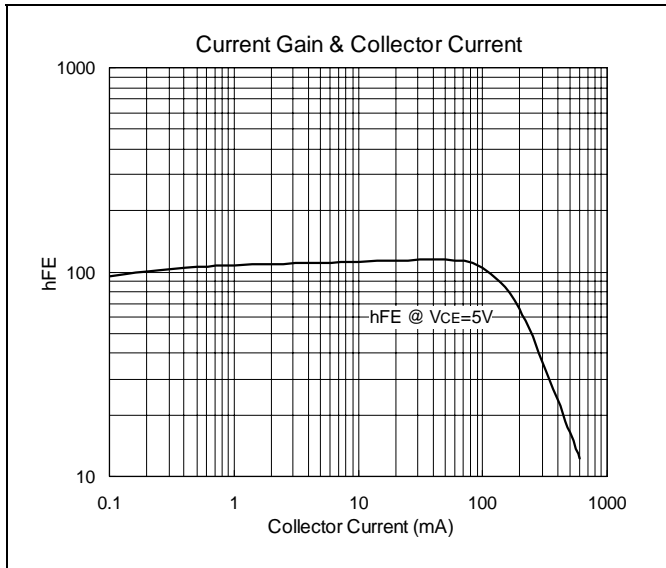
| Symbol   | Min. | Typ. | Max. | Unit | Test Conditions       |
|----------|------|------|------|------|-----------------------|
| BVCBO    | 50   | -    | -    | V    | IC=100uA, IE=0        |
| BVCEO    | 45   | -    | -    | V    | IC=1mA, IB=0          |
| BVEBO    | 5.0  | -    | -    | V    | IE=100uA, IC=0        |
| ICBO     | -    | -    | 50   | nA   | VCB=50V, IE=0         |
| IEBO     | -    | -    | 50   | nA   | VEB=5V, IC=0          |
| VCE(sat) | -    | 0.20 | 0.7  | V    | IC=100mA, IB=5mA      |
| VBE(sat) | -    | 0.82 | 1.0  | V    | IC=100mA, IB=5mA      |
| VBE(on)  | 0.6  | 0.65 | 0.75 | V    | VCE=5V, IC=2mA        |
| hFE      | 100  | 200  | 600  |      | VCE=5V, IC=1mA        |
| Cob      | -    | 4.5  | 7.0  | pF   | VCB=10V, f=1MHz, IE=0 |
| fT       | 100  | 190  | -    | MHz  | VCE=5V, IC=10mA       |

### Classification on hFE1

| Rank  | B       | C       |
|-------|---------|---------|
| Range | 100-300 | 200-600 |

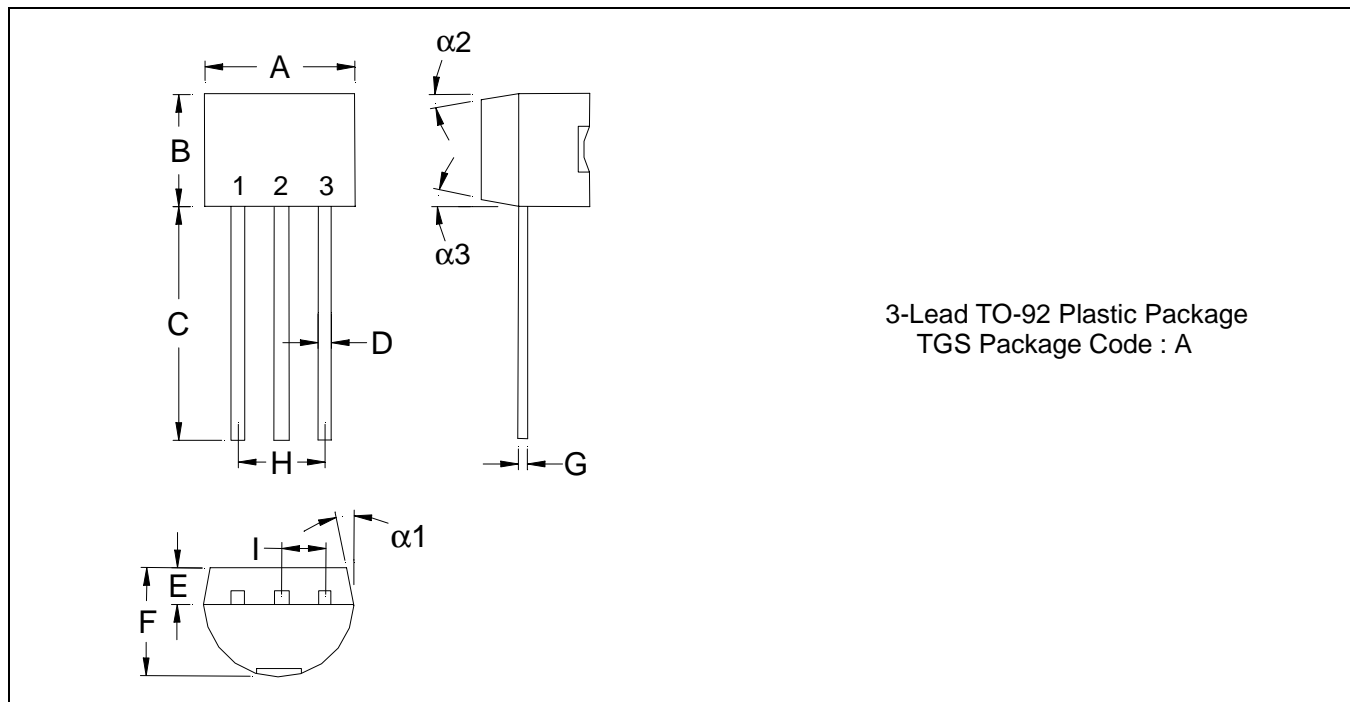


## Characteristics Curve





## 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  | α1  | -      | *5°     | -           | *5°   |
| E   | -      | *0.0500 | -           | *1.27 | α2  | -      | *2°     | -           | *2°   |
| F   | 0.1323 | 0.1480  | 3.36        | 3.76  | α3  | -      | *2°     | -           | *2°   |