

|  |  |              |             |
|--|--|--------------|-------------|
| <b>TRANSISTOR (NPN)</b>  | <b>SOT-23 Plastic-Encapsulate Transistors</b>  |              |             |
| <p><u>SOT-23</u></p> <p>1.BASE<br/>2.EMITTER<br/>3.COLLECTOR</p> | <p><b>Features</b></p> <ul style="list-style-type: none"> <li>※ Excellent Linearity</li> <li>※ High DC Current Gain</li> </ul> |              |             |
| <b>MAXIMUM RATINGS (Ta=25°C unless otherwise noted)</b>          |  |              |             |
| <b>Parameter</b>   | <b>Symbol</b>  | <b>Value</b> | <b>Unit</b> |
| Collector-Base Voltage   | VCBO   | 40           | V           |
| Collector-Emitter Voltage  | VCEO   | 20           | V           |
| Emitter-Base Voltage   | VEBO   | 6            | V           |
| Collector Current  | IC   | 1            | A           |
| Collector Power Dissipation                                      | PC   | 200          | mW          |
| Thermal Resistance From Junction To Ambient                      | RθJA   | 625          | °C/W        |
| Junction Temperature   | Tj   | 150          | °C          |
| Storage Temperature  | Tstg   | -55~+150     | °C          |

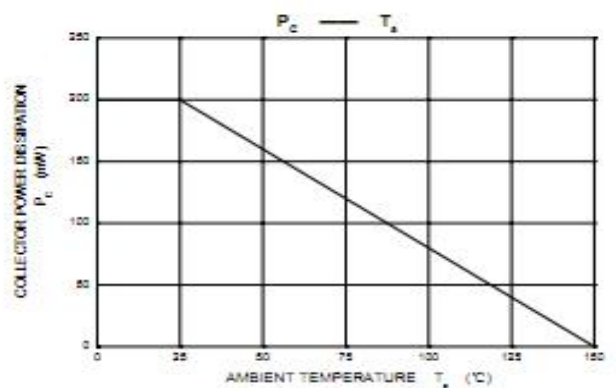
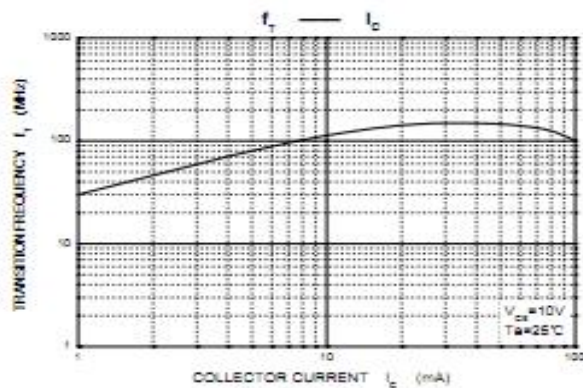
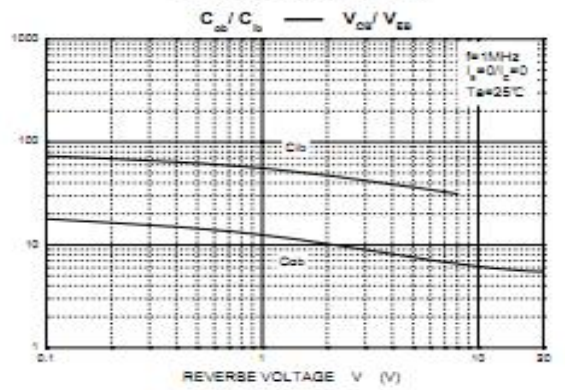
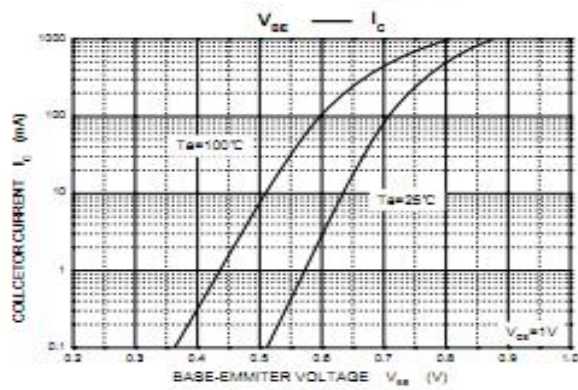
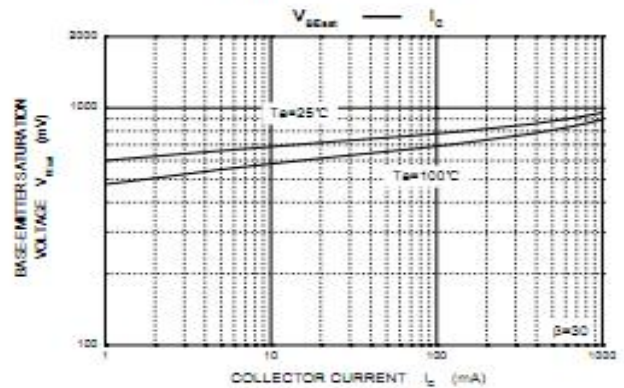
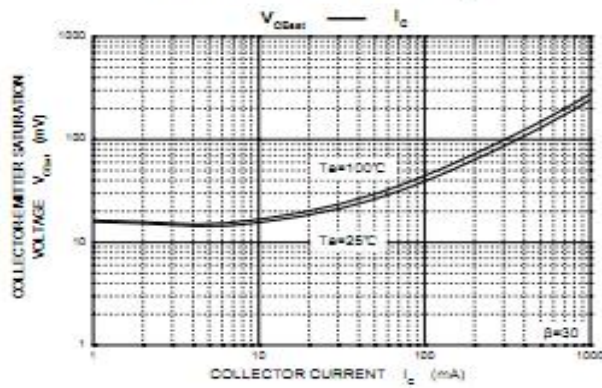
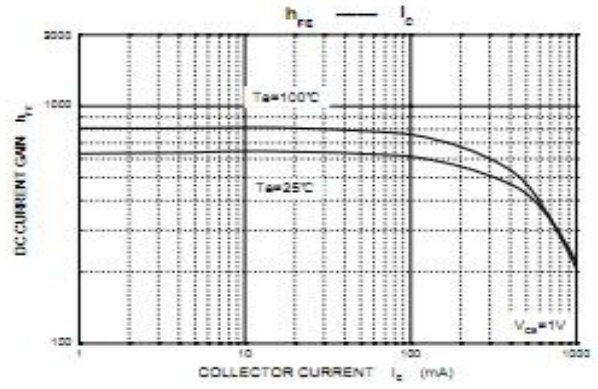
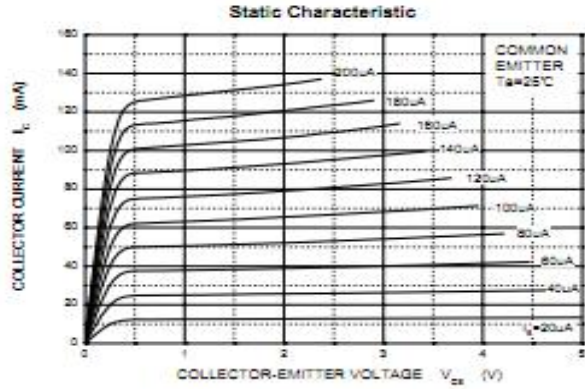
**ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)**

| Parameter                            | Symbol   | Test Condition               | Min | Typ | Max  | Unit |
|--------------------------------------|----------|------------------------------|-----|-----|------|------|
| Collector-base breakdown voltage     | V(BR)CBO | IC= 100 μA, IE=0             | 80  |     |      | V    |
| Collector-emitter breakdown voltage  | V(BR)CEO | IC= 1mA, IB=0                | 80  |     |      | V    |
| Emitter-base breakdown voltage       | V(BR)EBO | IE=100 μA, IC=0              | 4   |     |      | V    |
| Collector cut-off current            | ICBO     | VCB=35 V, IE=0               |     |     | 0.1  | μA   |
| Collector cut-off current            | ICEO     | VCB=20V, IE=0                |     |     | 1    | μA   |
| Emitter cut-off current              | IEBO     | VEB= 5V, IC=0                |     |     | 0.1  | μA   |
| DC current gain                      | hFE      | VCE=1V, IC= 1mA              | 290 |     |      |      |
|                                      | hFE      | VCE=1V, IC= 100mA            | 300 |     | 1000 |      |
| Collector-emitter saturation voltage | VCE(sat) | IC=600 mA, IB= 20mA          |     |     | 0.55 | V    |
| Base-emitter saturation voltage      | VBE(sat) | IC=600 mA, IB= 20mA          |     |     | 1.6  | V    |
| Transition frequency                 | fT       | VCE=2V, IC= 10mA<br>f=100MHz | 100 |     |      | MHz  |
| Collector Output Capacitance         | Cob      | VCB=-10V, IE= 0<br>f=1MHz    |     | 9   |      | pf   |

**CLASSIFICATION OF hFI**

| Rank  | B       | C       | D        |
|-------|---------|---------|----------|
| Range | 300-550 | 500-700 | 650-1000 |

TYPICAL ELECTRICAL AND THERMAL CHARACTERISTICS



单击下面可查看定价，库存，交付和生命周期等信息

[>>DIOS\(迪恩思\)](#)