

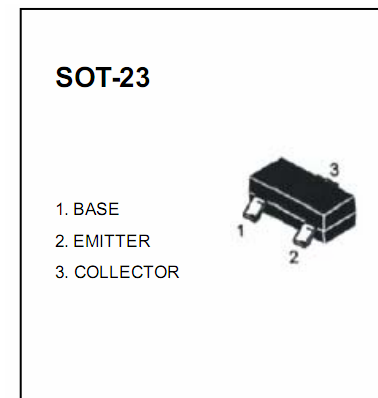
SOT-23 Plastic-Encapsulate Transistors

S8050 TRANSISTOR (NPN)

FEATURES

Complimentary to S8550
 Collector current: $I_C=0.5A$

MARKING: J3Y



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

| Symbol (符号) | Parameter (参数名称) | Value (额定值) | Units (单位) |
|----------------|---------------------------------------|----------------|---------------|
| VCBO | Collector-Base Voltage (集电极-基极电压) | 40 | V |
| VCEO | Collector-Emitter Voltage (集电极-发射极电压) | 25 | V |
| VEBO | Emitter-Base Voltage (发射极-基极电压) | 5 | V |
| IC | Collector Current -Continuous (集电极电流) | 0.5 | A |
| PC | Collector Power Dissipation (耗散功率) | 0.3 | W |
| Tj | Junction Temperature (结温) | 150 | °C |
| Tstg | Storage Temperature (储存温度) | -55-150 | °C |

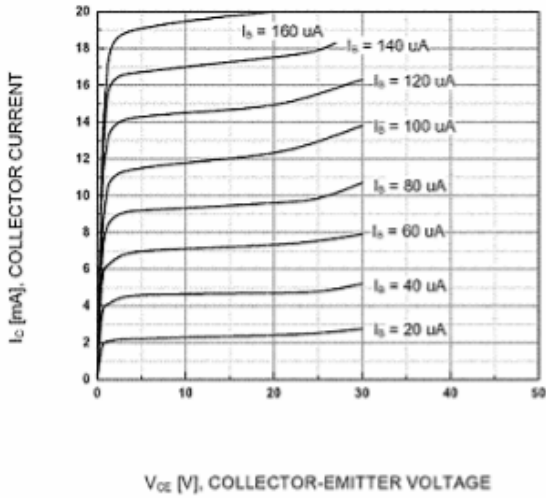
ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)

| Parameter (参数名称) | Symbol (符号) | Test conditions (测试条件) | MIN (最小值) | TYP (典型值) | MAX (最大值) | UNIT (单位) |
|---|----------------|---------------------------|--------------|--------------|--------------|--------------|
| Collector-base breakdown voltage 集电极-基极击穿电压 | V(BR)CBO | IC= 100μA, IE=0 | 40 | | | V |
| Collector-emitter breakdown voltage 集电极-发射极击穿电压 | V(BR)CEO | IC= 1mA, IB=0 | 25 | | | V |
| Emitter-base breakdown voltage 发射极-基极击穿电压 | V(BR)EBO | IE=100μA, IC=0 | 5 | | | V |
| Collector cut-off current 集电极-基极截止电流 | ICBO | VCB=30 V, IE=0 | | | 1 | μA |
| Collector cut-off current 集电极-发射极截止电流 | ICEO | VCE=25V, IB=0 | | | 10 | μA |
| Emitter cut-off current 发射极-基极截止电流 | IEBO | VEB=5V, IC=0 | | | 1 | μA |
| DC current gain 直流电流增益 | hFE | VCE=1V, IC= 50mA | 80 | | 400 | |
| Collector-emitter saturation voltage 集电极-发射极饱和压降 | VCE(sat) | IC=500mA, IB= 50mA | | | 0.5 | V |
| Base-emitter saturation voltage 发射极-基极饱和压降 | VBE(sat) | IC=500mA, IB= 50mA | | | 1.2 | V |

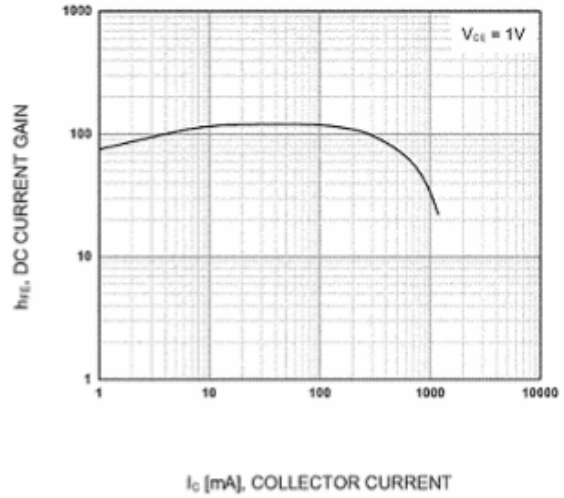
CLASSIFICATION OF hFE

| Range | 100-200 | 200-400 | 300-400 | 400-600 |
|-------|---------|---------|---------|---------|
| | | | | |

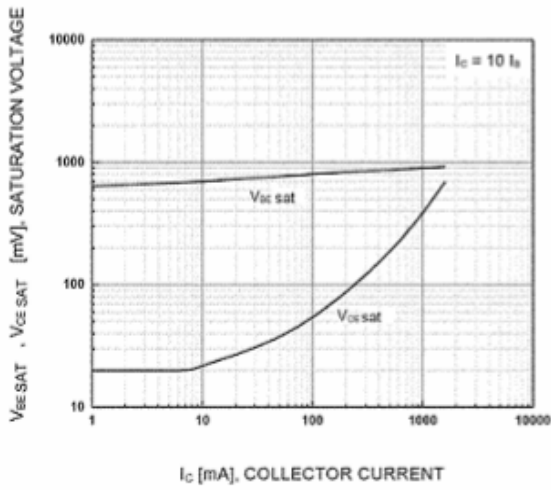
Typical Characteristics



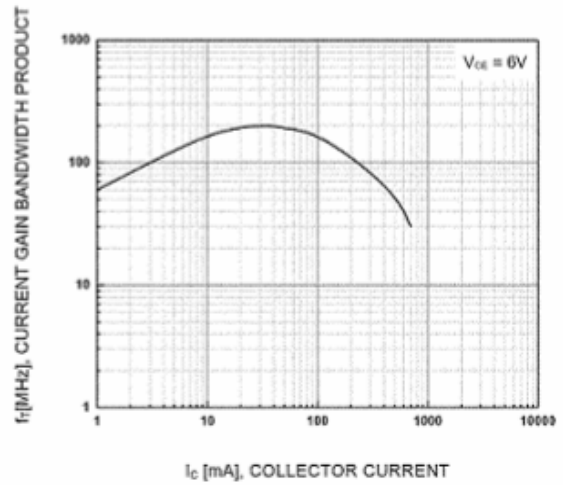
Static Characteristic



DC current Gain



Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage



Current Gain Bandwidth Product