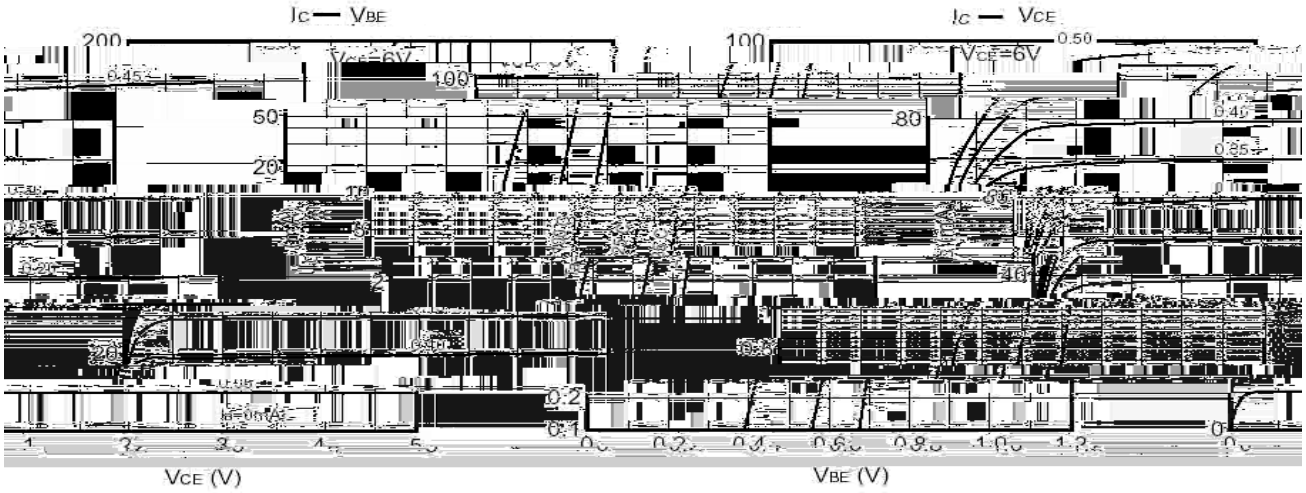
## / Absolute Maximum Ratings(Ta=25 )

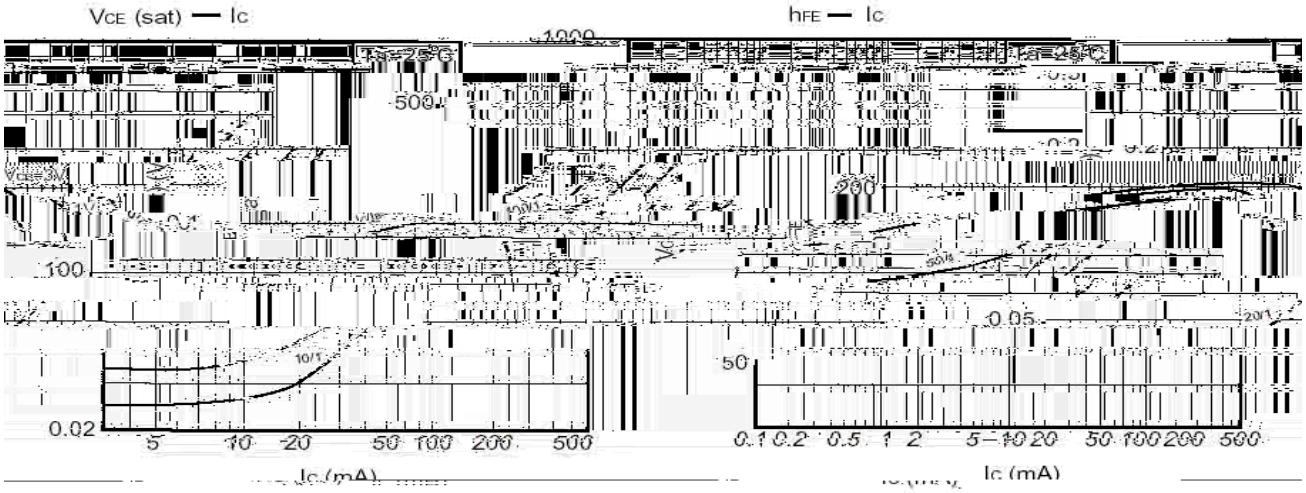
| Parameter | Symbol | Rating | Unit |
|---|---|---|---|
| Collector to Base Voltage | $V_{CBO}$ | 50 | V |
| Collector to Emitter Voltage | $V_{CEO}$ | 50 | V |
| Emitter to Base Voltage | $V_{EBO}$ | 5.0 | V |
| Collector Current | $I_C$ | 0.5 | A |
| Collector Power Dissipation | $P_C$ | 0.2 | W |
| Junction Temperature | $T_j$ | 150 | |
| Storage Temperature Range | $T_{stg}$ | -55 150 | |

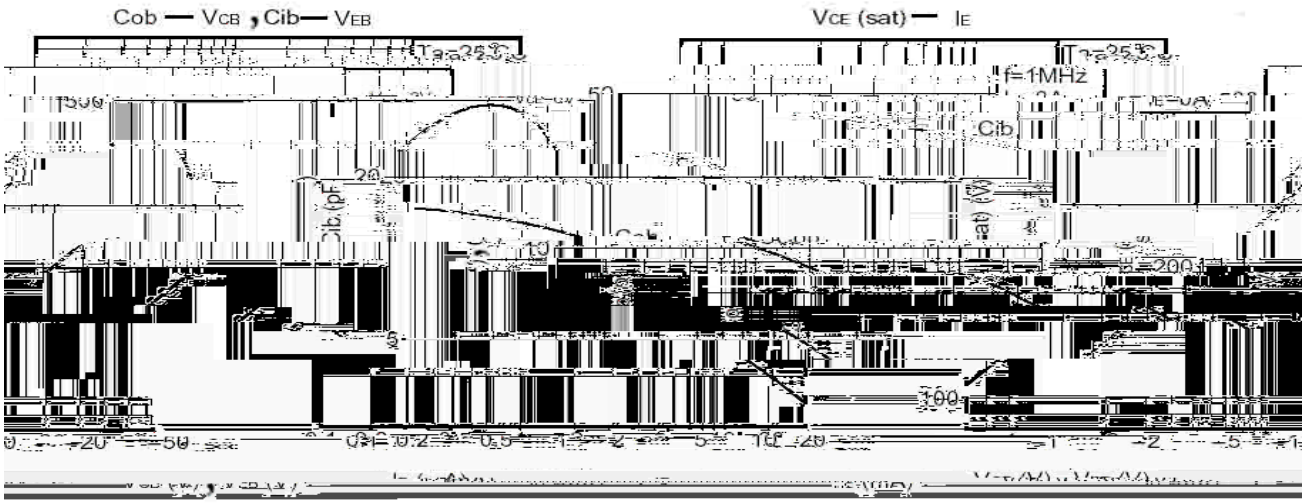
## / Electrical Characteristics(Ta=25 )

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|---|---|---|---|---|---|---|
| Collector-Base Breakdown Voltage | $V_{CBO}$ | $I_C$=0.1mA $I_E$=0 | 50 | | | V |
| Collector-emitter Breakdown Voltage | $V_{CEO}$ | $I_C$=1.0mA $I_B$=0 | 50 | | | V |
| Emitter-Base Breakdown Voltage | $V_{EBO}$ | $I_E$=0.1mA $I_C$=0 | 5.0 | | | V |
| Collector Cut-Off Current | $I_{CBO}$ | $V_{CB}$=30V $I_E$=0 | | | 0.5 | μA |
| Emitter Base Cut-Off Current | $I_{EBO}$ | $V_{EB}$=4.0V $I_C$=0 | | | 0.5 | μA |
| DC Current Gain | $h_{FE}$ | $V_{CE}$=3.0V $I_C$=0.1A | 120 | | 560 | |
| Collector to Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C$=150mA $I_B$=15mA | | | 0.4 | V |
| Transition Frequency | $f_T$ | $V_{CE}$=5V $I_C$=20mA f=100MHz | | 250 | | MHz |
| Collector Output Capacitance | $C_{ob}$ | $V_{CB}$=10V $I_E$=0 f=1.0MHz | | 6.5 | | pF |

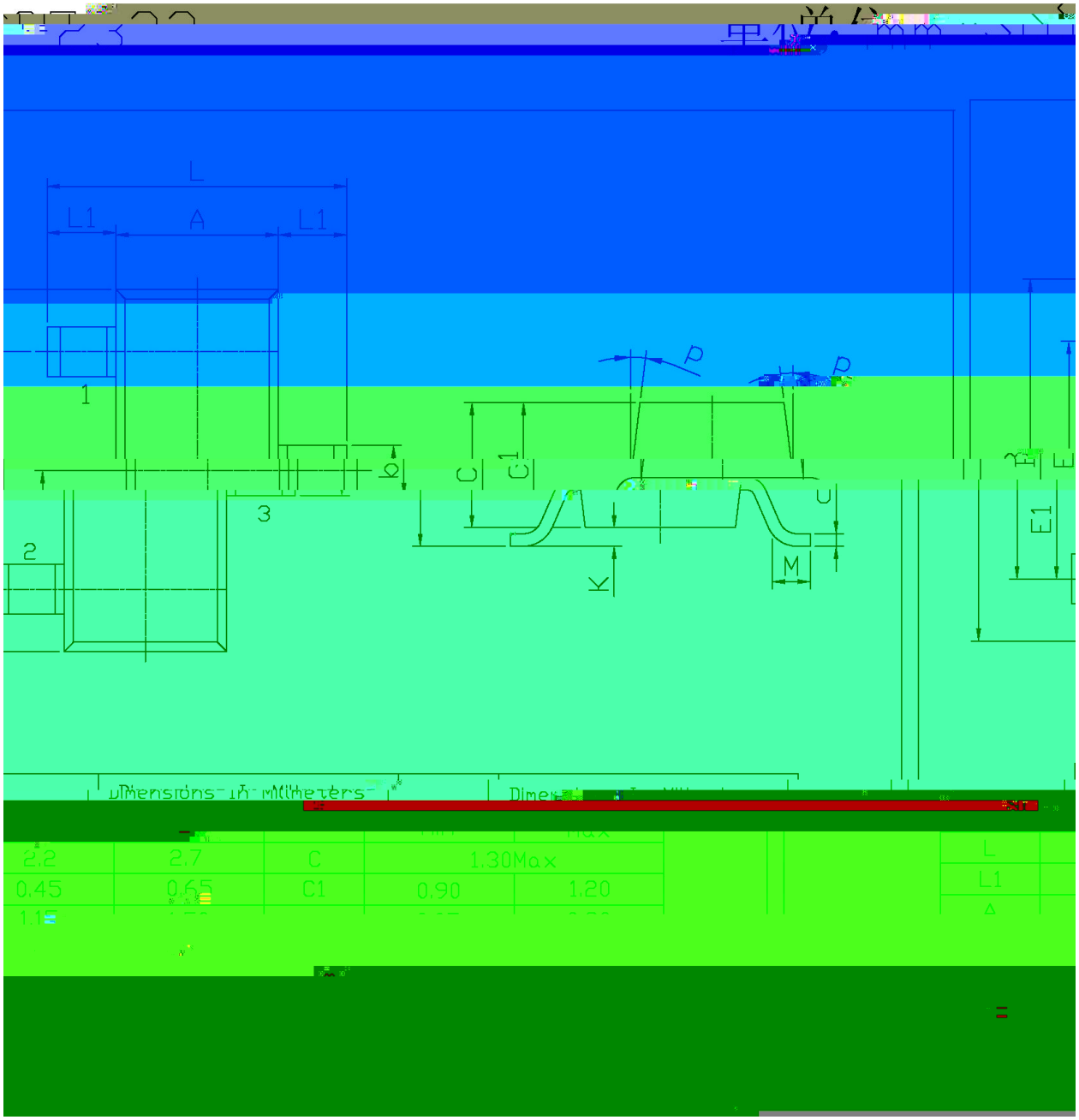
## / Electrical Characteristic Curve



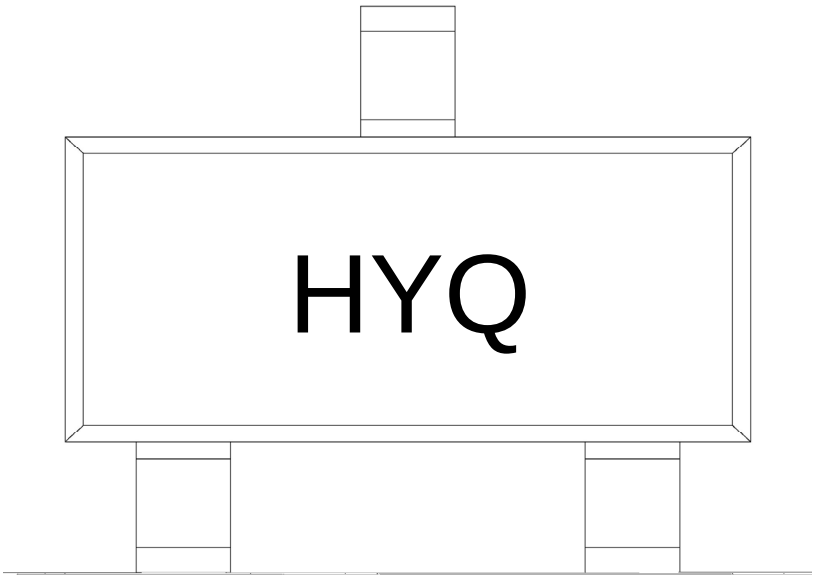



## / Package Dimensions



## / Marking Instructions




H

Y

Q: $h_{FE}$

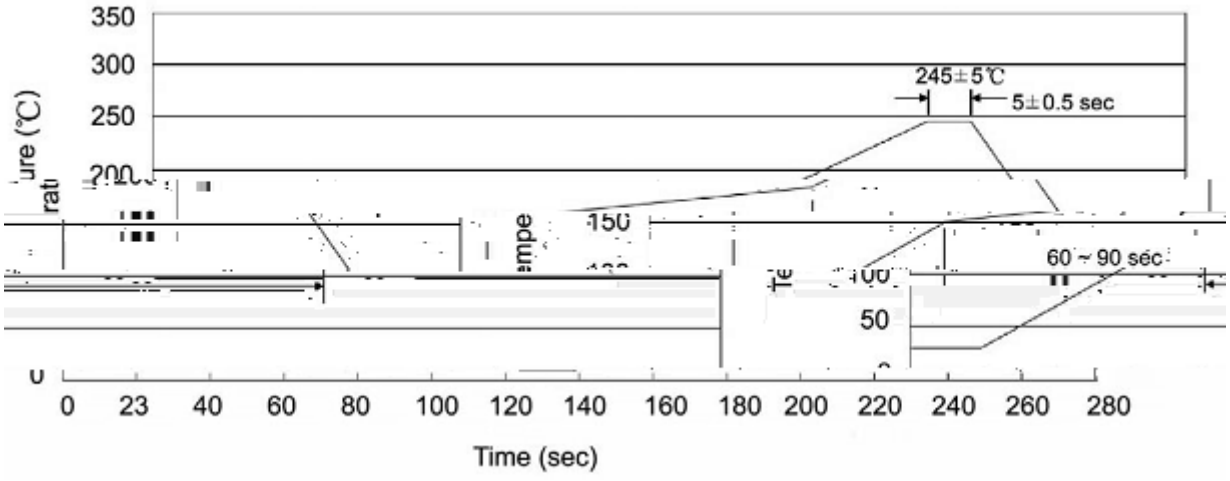
Note:

H: Company Code

Y: Product Type Code

Q: $h_{FE}$ Classifications Symbol Code

## ( ) / Temperature Profile for IR Reflow Soldering(Pb-Free)




Note:

1 25 150 60 90sec;

1.Preheating:25~150 , Time:60~90sec.

2 245±5 5±0.5sec;

2.Peak Temp.:245±5 , Duration:5±0.5sec.

3 2 10 /sec.

3. Cooling Speed: 2~10 /sec.

## / Resistance to Soldering Heat Test Conditions

260±5 10±1 sec. Temp.:260±5 Time:10±1 sec

## / Packaging SPEC.

/ REEL

| Package Type 封装形式 | Units 包装数量 | | | | | Dimension 包装尺寸 (unit: $mm^3$) | | |
|---|---|---|---|---|---|---|---|---|
| | Units/Reel 只/卷盘 | Reels/Inner Box 卷盘/盒 | Units/Inner Box 只/盒 | Inner Boxes/Outer Box 盒/箱 | Units/Outer Box 只/箱 | Reel | Inner Box 盒 | Outer Box 箱 |
| SOT-23 | 3,000 | 10 | 30,000 | 6 | 180,000 | 7 ρ ×8 | 180×120×180 | 390×385×205 |

## / Notices