# 2SC3142

Rev.F Apr.-2017

蓝箭电子 BLUE ROCKET ELECTRONICS

DATA SHEET

## / Descriptions

SOT-23 NPN Silicon NPN transistor in a SOT-23 Plastic Package.

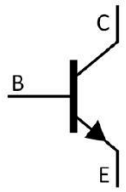
## / Features

High $f_T$.

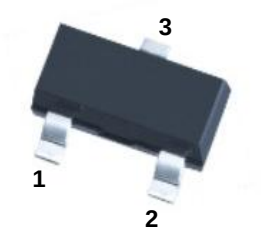
## / Applications

High frequency general-purpose amplifier applications.

## / Equivalent Circuit




## / Pinning



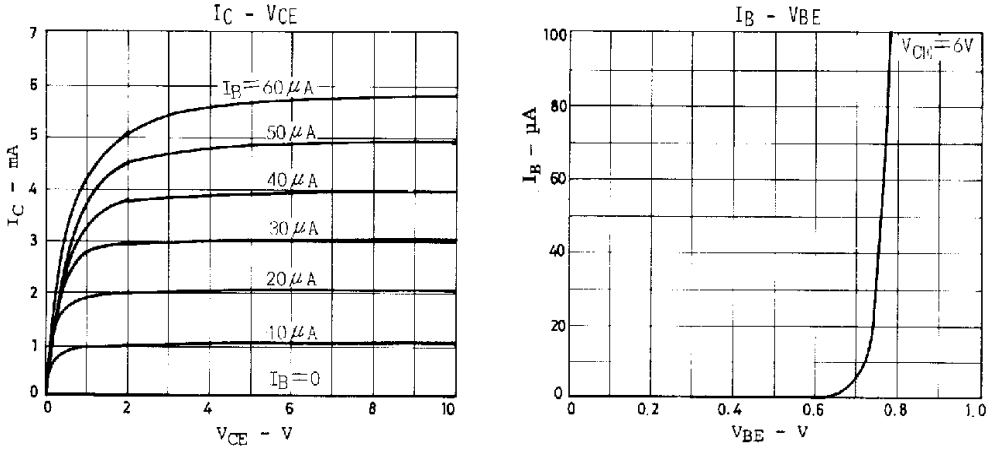

PIN1 Base PIN 2 Emitter PIN 3 Collector

## / $h_{FE}$ Classifications & Marking

| $h_{FE}$ Classifications Symbol | 2 | 3 | 4 |
|---|---|---|---|
| $h_{FE}$ Range | 40 80 | 60 120 | 90 180 |
| Marking | HJ2 | J3H | HJ4 |

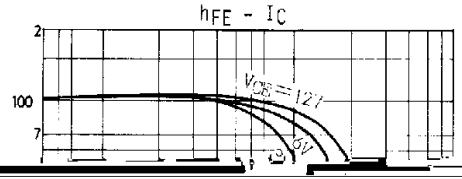
| Parameter | Symbol | Rating | Unit |
|---|---|---|---|
| Collector to Base Voltage | $V_{CBO}$ | 25 | V |
| Collector to Emitter Voltage | $V_{CEO}$ | 20 | V |
| Emitter to Base Voltage | $V_{EBO}$ | 3.0 | V |
| Collector Current | $I_C$ | 30 | mA |
| Collector Power Dissipation | $P_C$ | 150 | mW |
| Junction Temperature | $T_j$ | 150 | |
| Storage Temperature Range | $T_{stg}$ | | |

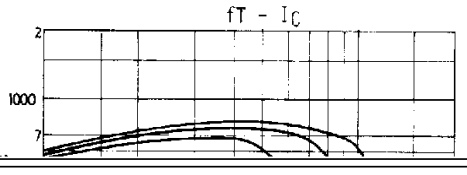
## / Electrical Characteristic Curve

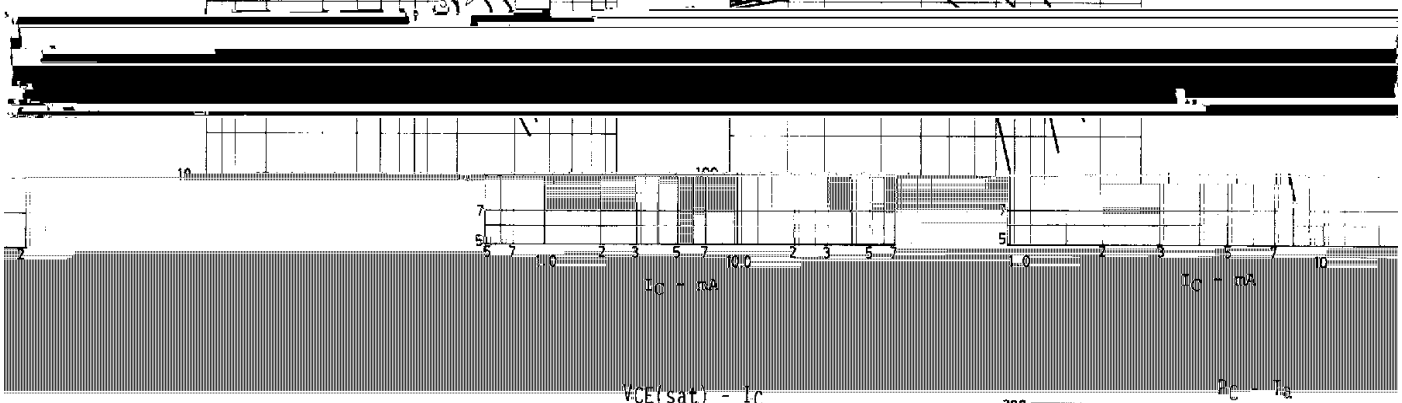


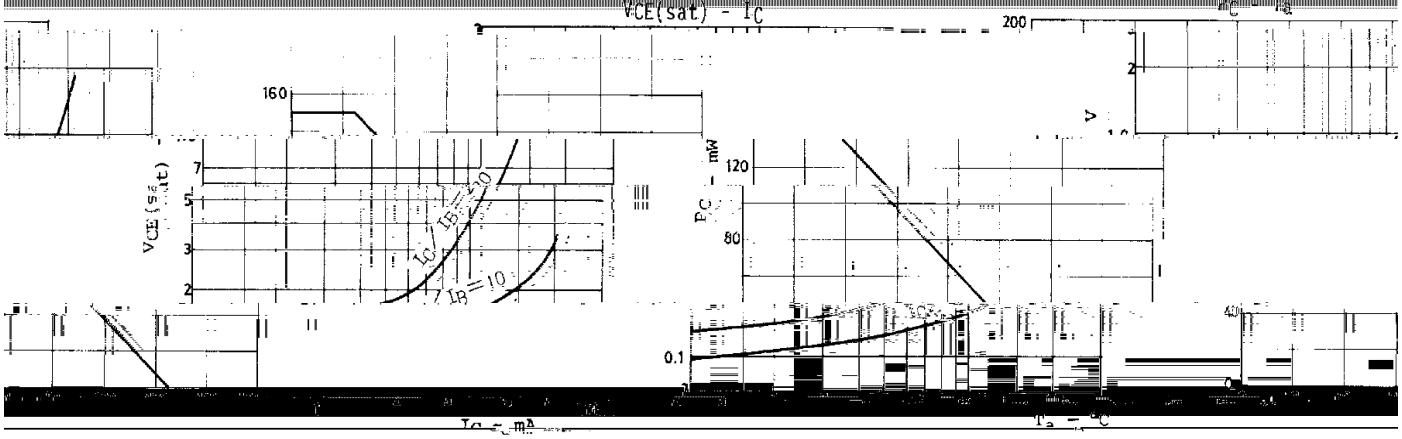




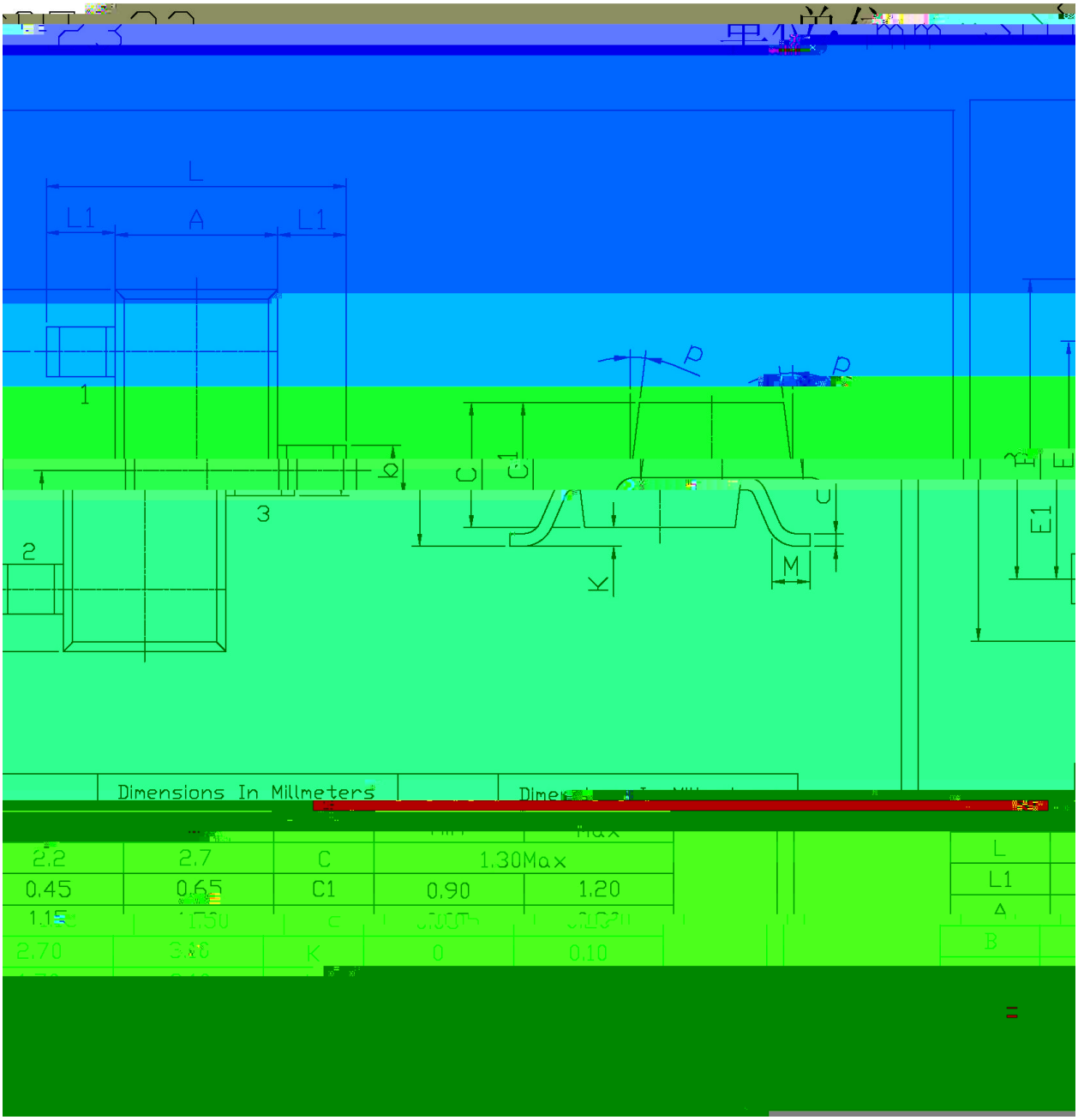


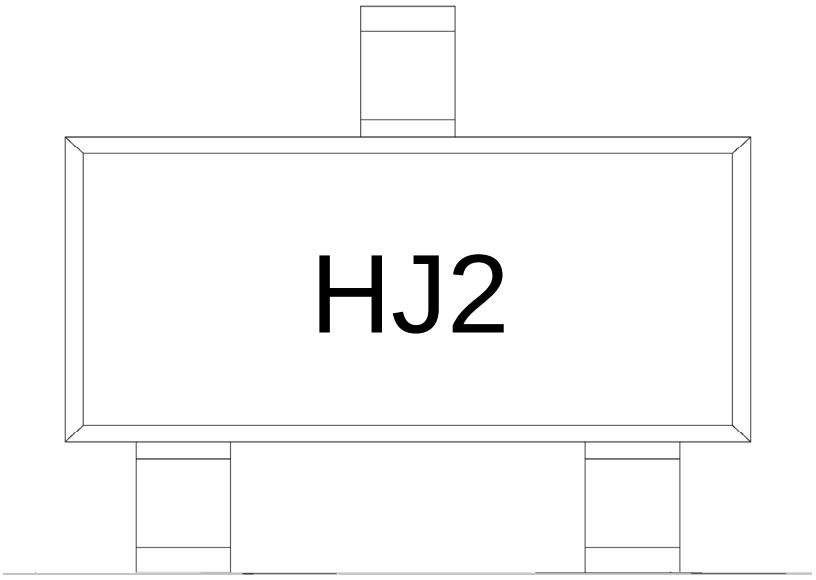



## / Package Dimensions



## / Marking Instructions




H

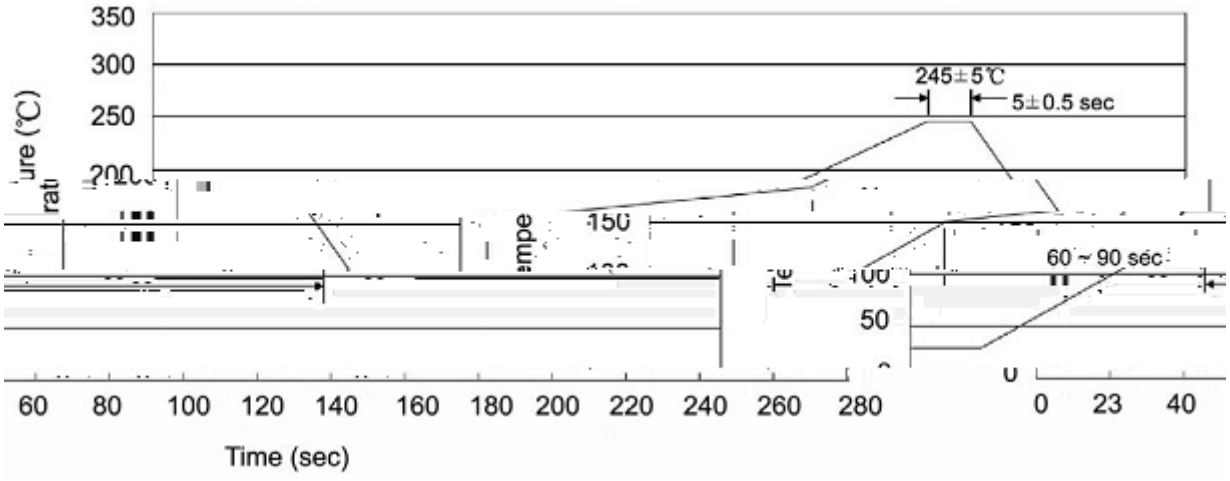
J

2 $h_{FE}$

Note:

| | |
|---|---|
| H | Company Code |
| J | Product Type Code |
| 2 | $h_{FE}$ 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

Units Dimension (unit $mm^3$)