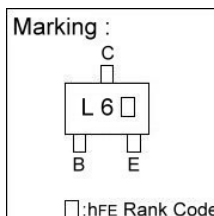
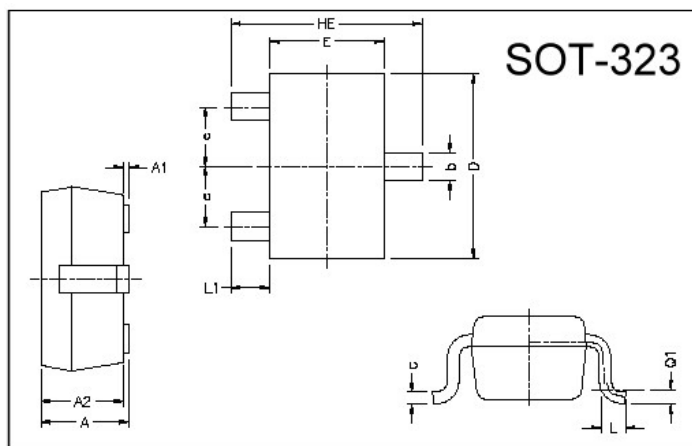


## DESCRIPTION

The 2SC1623F is designed for use driver stage of AF amplifier and general purpose application.

## PACKAGE DIMENSIONS



| REF. | Millimeter |      | REF. | Millimeter |      |
|------|------------|------|------|------------|------|
|      | Min.       | Max. |      | Min.       | Max. |
| A    | 0.80       | 1.10 | L1   | 0.42       | REF. |
| A1   | 0          | 0.10 | L    | 0.15       | 0.35 |
| A2   | 0.80       | 1.00 | b    | 0.25       | 0.40 |
| D    | 1.80       | 2.20 | c    | 0.10       | 0.25 |
| E    | 1.15       | 1.35 | e    | 0.65       | REF. |
| HE   | 1.80       | 2.40 | Q1   | 0.15       | BSC. |

## ABSOLUTE MAXIMUM RATINGS at Ta = 25°C

| Parameter                     | Symbol         | Ratings          | Unit |
|-------------------------------|----------------|------------------|------|
| Collector to Base Voltage     | $V_{CBO}$      | 60               | V    |
| Collector to Emitter Voltage  | $V_{CEO}$      | 50               | V    |
| Emitter to Base Voltage       | $V_{EBO}$      | 5                | V    |
| Collector Current             | $I_C$          | 150              | mA   |
| Total Power Dissipation       | $P_d$          | 250              | mW   |
| Junction, Storage Temperature | $T_J, T_{STG}$ | +150, -55 ~ +150 | °C   |

## CHARACTERISTICS at Ta = 25°C

| Symbol           | Min. | Typ. | Max. | Unit | Test Conditions                 |
|------------------|------|------|------|------|---------------------------------|
| $BVC_{BO}$       | 60   | -    | -    | V    | $I_C=100\mu A$                  |
| $BV_{CEO}$       | 50   | -    | -    | V    | $I_C=1mA$                       |
| $BVE_{BO}$       | 5    | -    | -    | V    | $I_E=10\mu A$                   |
| $IC_{BO}$        | -    | -    | 100  | nA   | $V_{CB}=60V$                    |
| $IE_{BO}$        | -    | -    | 100  | nA   | $V_{EB}=5V$                     |
| * $V_{CE(sat)}$  | -    | -    | 250  | mV   | $I_C=100mA, I_B=10mA$           |
| * $V_{BE(sat)1}$ | -    | -    | 1.0  | V    | $I_C=100mA, I_B=10mA$           |
| * $h_{FE1}$      | 90   | -    | 600  |      | $V_{CE}=6V, I_C=1mA$            |
| * $h_{FE2}$      | 25   | -    | -    |      | $V_{CE}=6V, I_C=150mA$          |
| * $h_{FE3}$      | 80   | -    | -    |      | $V_{CE}=1V, I_C=10mA$           |
| $f_T$            | 80   | -    | -    | MHz  | $V_{CE}=10V, I_C=1mA, f=100MHz$ |
| $C_{ob}$         | -    | -    | 3.5  | pF   | $V_{CB}=10V, f=1MHz, I_E=0A$    |

\* Pulse Test: Pulse Width  $\leq 380\mu s$ , Duty Cycle  $\leq 2\%$

## CLASSIFICATION OF $h_{FE1}$

| Rank  | P        | Y         | G         | B         |
|-------|----------|-----------|-----------|-----------|
| Range | 90 - 180 | 135 - 270 | 200 - 400 | 300 - 600 |

## CHARACTERISTIC CURVES

