

## / Descriptions

TO-126F          PNP          Silicon PNP transistor in a TO-126F Plastic Package.

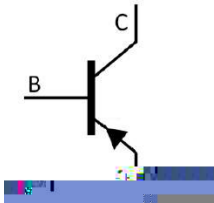
## / Features

2SC3788  
High breakdown voltage, small reverse transfer capacitance and excellent high frequency characteristic, complementary pair with 2SC3788.

## / Applications

CRT  
High-definition CRT display video output applications.

## / Equivalent Circuit



## / Pinning



PIN1   Emitter          PIN 2   Collector          PIN 3   Base

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

| $h_{FE}$ Classifications<br>Symbol | C       | D        | E         | F         |
|------------------------------------|---------|----------|-----------|-----------|
| $h_{FE}$ Range                     | 40   80 | 60   120 | 100   200 | 160   320 |

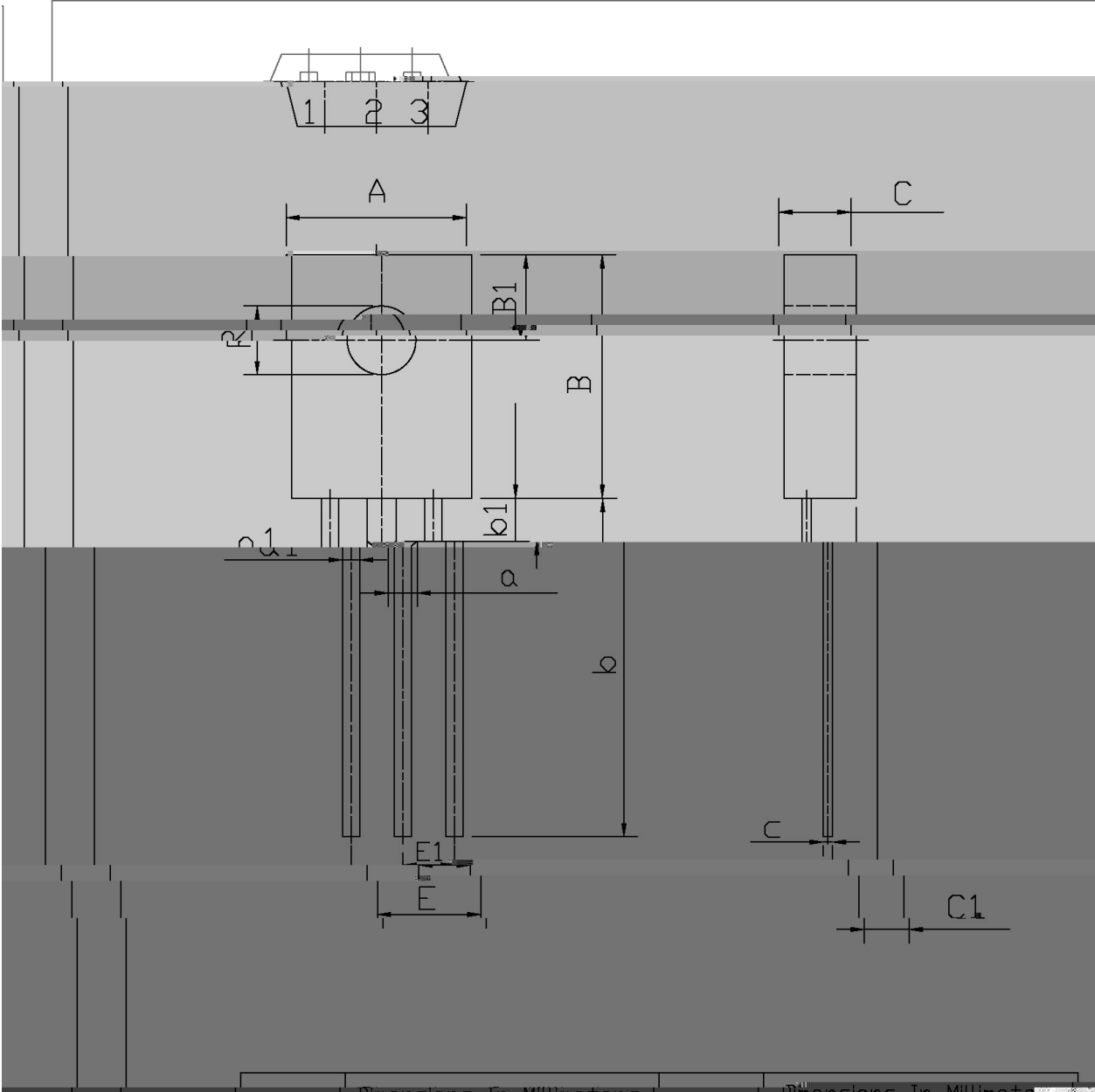
| Parameter                             | Symbol                      | Rating    | Unit |
|---------------------------------------|-----------------------------|-----------|------|
| Collector to Base Voltage             | $V_{CBO}$                   | -200      | V    |
| Collector to Emitter Voltage          | $V_{CEO}$                   | -200      | V    |
| Emitter to Base Voltage               | $V_{EBO}$                   | -5.0      | V    |
| Collector Current - Continuous        | $I_C$                       | -100      | mA   |
| Collector Current – Continuous(Pulse) | $I_{CP}$                    | -200      | mA   |
| Collector Power Dissipation           | $P_C$                       | 1.3       | W    |
| Collector Power Dissipation           | $P_C(T_C=25^\circ\text{C})$ | 5.0       | W    |
| Junction Temperature                  | $T_j$                       | 150       |      |
| Storage Temperature Range             | $T_{stg}$                   | -55 ~ 150 |      |

| Parameter                               | Symbol    | Test Conditions                         | Min  | Typ | Max  | Unit          |
|-----------------------------------------|-----------|-----------------------------------------|------|-----|------|---------------|
| Collector to Base Breakdown Voltage     | $V_{CBO}$ | $I_C=-10\mu\text{A}$ $I_E=0$            | -200 |     |      | V             |
| Collector to Emitter Breakdown Voltage  | $V_{CEO}$ | $I_C=-1.0\text{mA}$ $I_B=0$             | -200 |     |      | V             |
| Emitter to Base Breakdown Voltage       | $V_{EBO}$ | $I_E=-10\mu\text{A}$ $I_C=0$            | -5.0 |     |      | V             |
| Collector Cut-Off Current               | $I_{CBO}$ | $V_{CB}=-150\text{V}$ $I_E=0$           |      |     | -0.1 | $\mu\text{A}$ |
| Emitter Cut-Off Current                 | $I_{EBO}$ | $V_{EB}=-4.0\text{V}$ $I_C=0$           |      |     | -0.1 | $\mu\text{A}$ |
| DC Current Gain                         | $h_{FE}$  | $V_{CE}=-10\text{V}$ $I_C=-10\text{mA}$ | 40   |     | 320  |               |
| Collector to Emitter Saturation Voltage | VEB       |                                         |      |     |      |               |



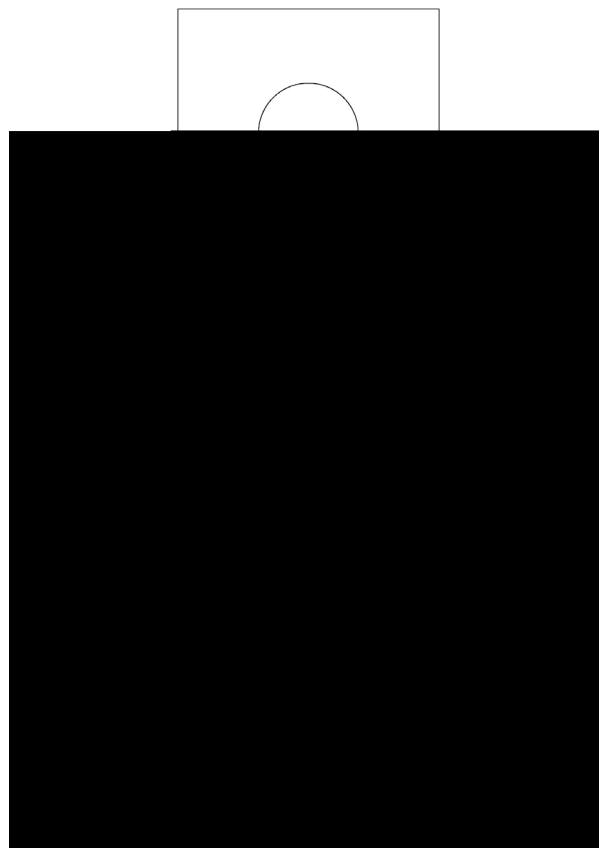
/ Package Dimensions

TU-126F 单位: mm



| Symbol | Min | Max | Symbol | Min  | Max  |
|--------|-----|-----|--------|------|------|
| A      | 7.8 | 8.2 | a1     | 0.65 | 0.85 |

/ Marking Instructions



BR

A1478

C:  $h_{FE}$

\*\*\*\*

Note:

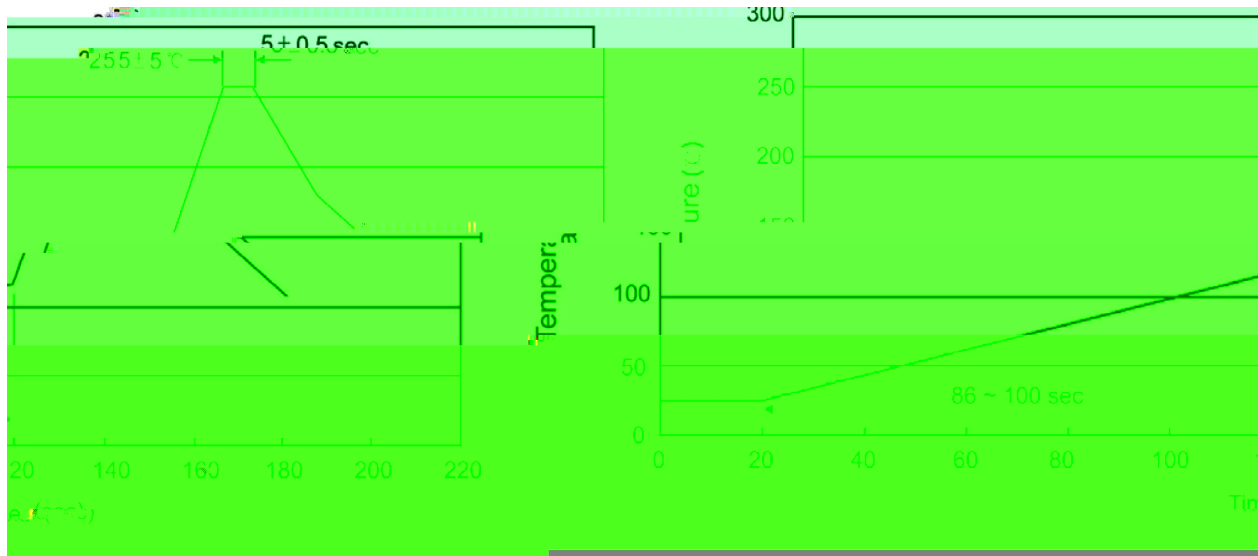
BR: Company Code

A1478: Product Type.

C:  $h_{FE}$  Classifications Symbol

\*\*\*\*: Lot No. Code, code chango2uoth Lot No.

( ) / Temperature Profile for Dip Soldering(Pb-Free)



Note:

- |   |       |     |           |                                         |                                      |
|---|-------|-----|-----------|-----------------------------------------|--------------------------------------|
| 1 | 25    | 150 | 60        | 90sec;                                  | 1.Preheating:25~150 , Time:60~90sec. |
| 2 | 255±5 |     | 5±0.5sec; | 2.Peak Temp.:255±5 , Duration:5±0.5sec. |                                      |
| 3 |       | 2   | 10        | /sec.                                   | 3. Cooling Speed: 2~10 /sec.         |

/ Resistance to Soldering Heat Test Conditions

270±5      10±1 sec.      Temp.:270±5      Time:10±1 sec

/ Packaging SPEC.

/ BULK

| Package Type | Units           |                      |                      |                            |                      | Dimension (unit mm <sup>3</sup> ) |             |             |
|--------------|-----------------|----------------------|----------------------|----------------------------|----------------------|-----------------------------------|-------------|-------------|
|              | Units/Tube<br>/ | Tubes/Inner Box<br>/ | Units/Inner Box<br>/ | Inner Boxes/Outer Box<br>/ | Units/Outer Box<br>/ | Tube                              | Inner Box   | Outer Box   |
| TO-126/F     | 500             | 6                    | 3,000                | 5                          | 15,000               | 135×190                           | 237×172×102 | 560×245×195 |

/ TUBE

| Package Type | Units           |                      |                      |                            |                      | Dimension (unit mm <sup>3</sup> ) |            |             |
|--------------|-----------------|----------------------|----------------------|----------------------------|----------------------|-----------------------------------|------------|-------------|
|              | Units/Tube<br>/ | Tubes/Inner Box<br>/ | Units/Inner Box<br>/ | Inner Boxes/Outer Box<br>/ | Units/Outer Box<br>/ | Tube                              | Inner Box  | Outer Box   |
| TO-126/F     | 65              | 26                   | 1,690                | 5                          | 8,450                | 532×31×5.6                        | 555×164×50 | 575×290×180 |

/ Notices