# 2SA1478

Rev.E Mar.-2016

蓝箭电子 BLUE ROCKET ELECTRONICS

**DATA SHEET**

## / Descriptions

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

## / Features

, 2SC3788

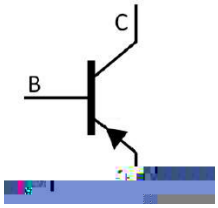
High breakdown voltage, small reverse transfer capacitance and excellent high frequency characteristic, complementary pair with 2SC3788.

## / Applications

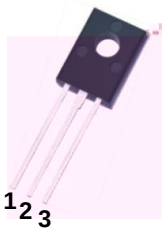
CRT

High-definition CRT display video output applications.

## / Equivalent Circuit




## / Pinning




PIN1 Emitter PIN 2 Collector PIN 3 Base

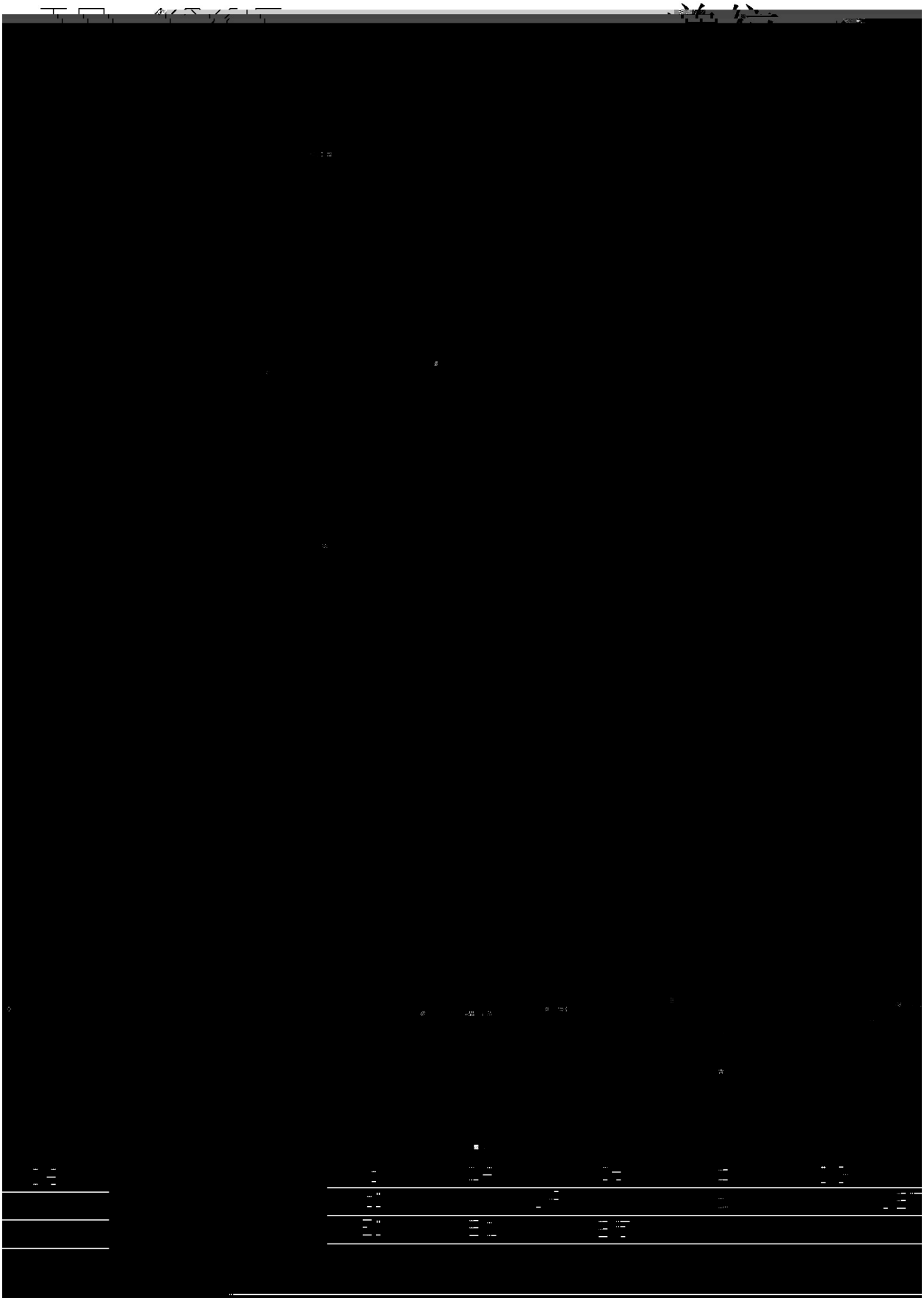
## / $h_{FE}$ Classifications & Marking

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

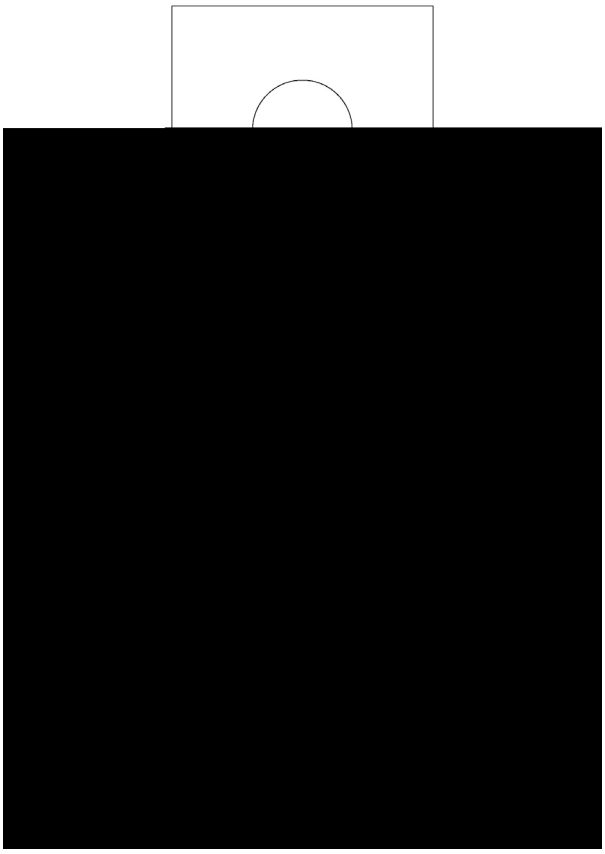
| Parameter | Symbol | Rating | Unit |
|---|---|---|---|
| Collector to Base Voltage | $V_{CBO}$ | -200 | V |
| Collector to Emitter Voltage | $V_{CEO}$ | -200 | V |
| Emitter to Base Voltage | $V_{EBO}$ | -5.0 | V |
| Collector Current - Continuous | $I_C$ | -100 | mA |
| Collector Current – Continuous(Pulse) | $I_{CP}$ | -200 | mA |
| Collector Power Dissipation | $P_C$ | 1.3 | W |
| Collector Power Dissipation | $P_C(T_C=25$ ) | 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 | $V_{CBO}$ | $I_C$=-10μA $I_E$=0 | -200 | | | V |
| Collector to Emitter Breakdown Voltage | $V_{CEO}$ | $I_C$=-1.0mA $I_B$=0 | -200 | | | V |
| Emitter to Base Breakdown Voltage | $V_{EBO}$ | $I_E$=-10μA $I_C$=0 | -5.0 | | | V |
| Collector Cut-Off Current | $I_{CBO}$ | $V_{CB}$=-150V $I_E$=0 | | | -0.1 | μA |
| Emitter Cut-Off Current | $I_{EBO}$ | $V_{EB}$=-4.0V $I_C$=0 | | | -0.1 | μA |
| DC Current Gain | $h_{FE}$ | $V_{CE}$=-10V $I_C$=-10mA | 40 | | 320 | |
| Collector to Emitter Saturation Voltage | Voltage olt5771 0) Tm-0.0003 Tc(EB)Tj10.5286w[olt)7.8(ag(Tm-0.0016 Tc(=-1 | | | | | |

## / Package Dimensions



## / Marking Instructions



BR

A1478

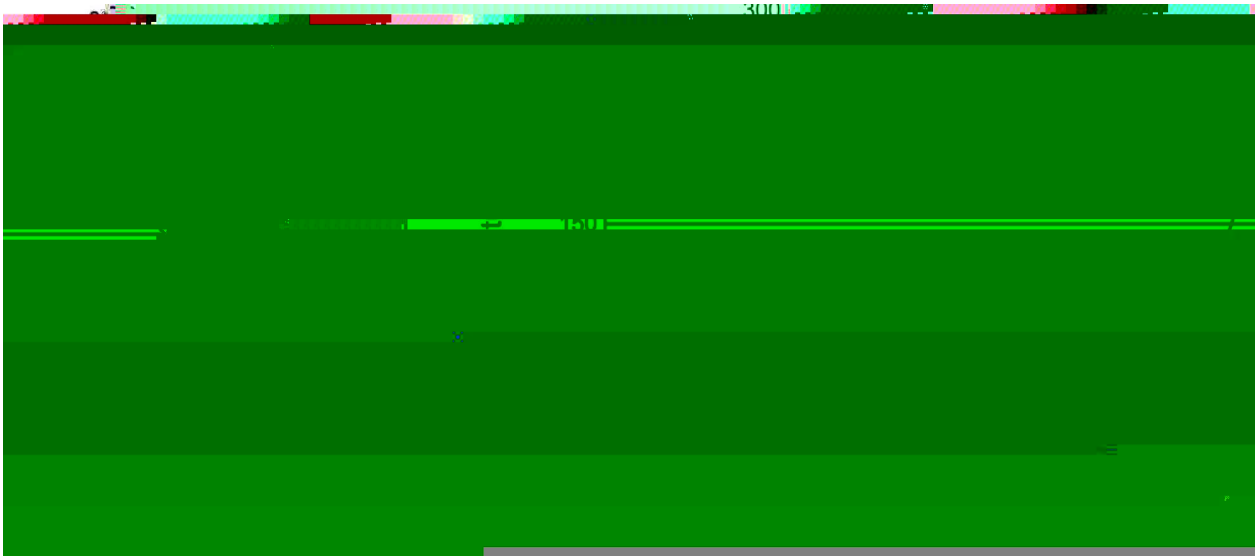
C: $h_{FE}$

****

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$^3$) |
|---|---|---|---|---|---|---|---|---|
| | Units/Tube / | Tubes/Inner Box / | Units/Inner Box / | Inner Boxes/Outer Box / | Units/Outer Box / | 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$^3$) |
|---|---|---|---|---|---|---|---|---|
| | Units/Tube / | Tubes/Inner Box / | Units/Inner Box / | Inner Boxes/Outer Box / | Units/Outer Box / | 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