# 2SC2710

Rev.E Mar.-2016

**DATA SHEET**

## / Descriptions

| | | |
|---|---|---|
| TO-92 | NPN | Silicon NPN transistor in a TO-92 Plastic Package. |

## / Features

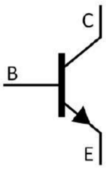
, 2SA1150

High DC current gain, complementary pair with 2SA1150.

## / Applications

Audio amplifier applications.

## / Equivalent Circuit



## / Pinning

[redacted]

3

PIN1 Base PIN 2 Collector PIN 3 Emitter

## / hFE Classifications & Marking

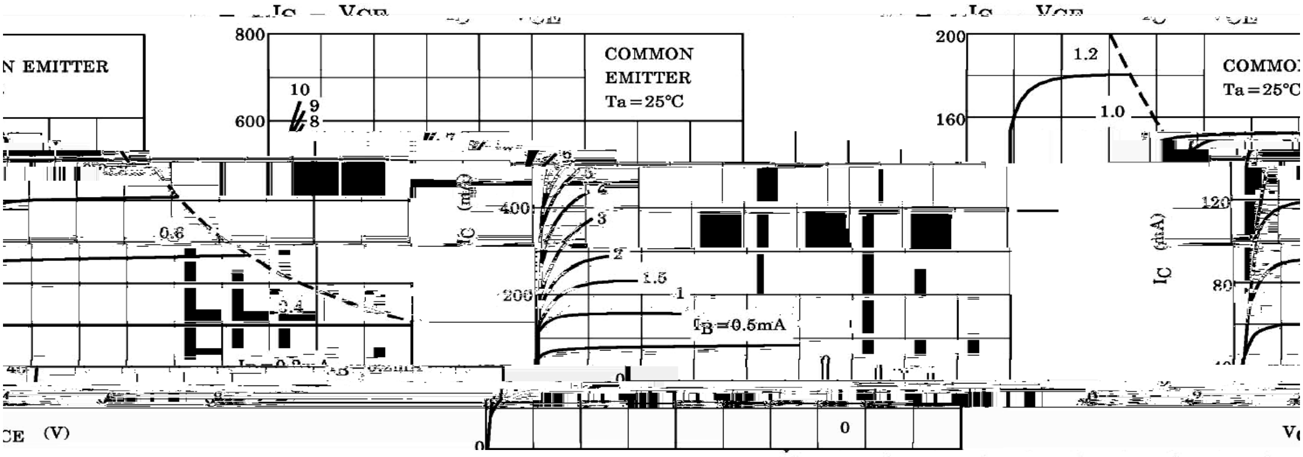
| $h_{FE}$ Classifications Symbol | O | Y |
|---|---|---|
| $h_{FE}$ Range | 100~200 | 160~320 |

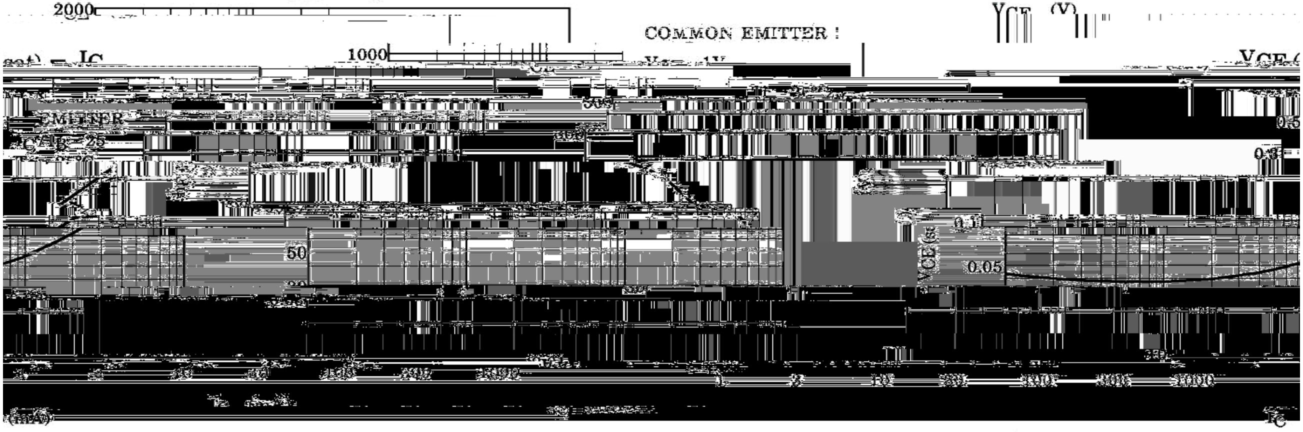
| Parameter | Symbol | Rating | Unit |
|---|---|---|---|
| Collector to Base Voltage | $V_{CBO}$ | 35 | V |
| Collector to Emitter Voltage | $V_{CEO}$ | 30 | V |
| Emitter to Base Voltage | $V_{EBO}$ | 5.0 | V |
| Collector Current - Continuous | $I_C$ | 800 | mA |
| Base Current - Continuous | $I_B$ | 160 | mA |
| Collector Power Dissipation | $P_C$ | 300 | mW |
| Junction Temperature | $T_j$ | 150 | |
| Storage Temperature Range | $T_{stg}$ | -55 150 | |

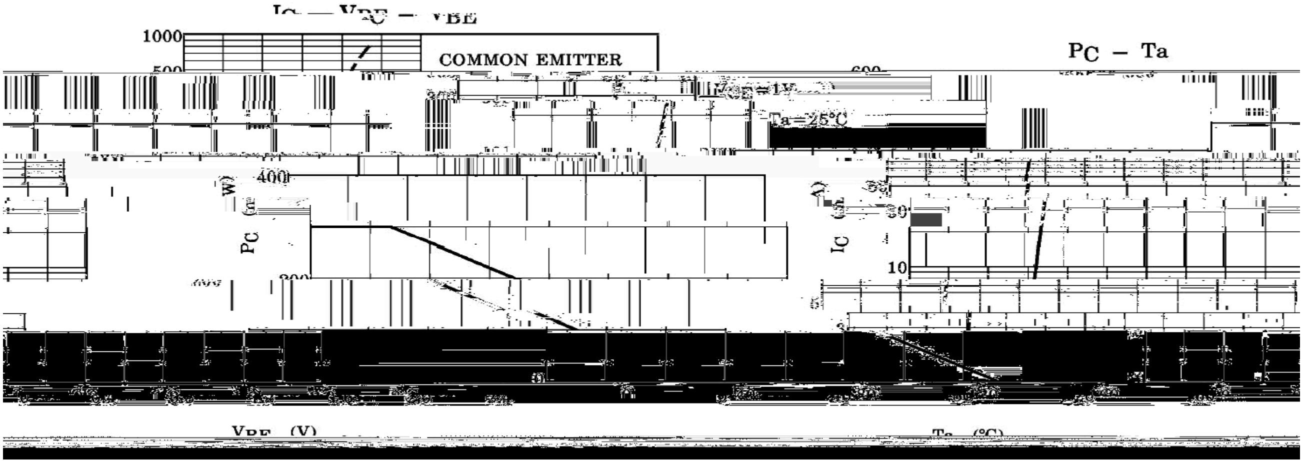
| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|---|---|---|---|---|---|---|
| Collector to Emitter Breakdown Voltage | $V_{CEO}$ | $I_C$=10mA $I_B$=0 | 30 | | | V |
| Collector Cut-Off Current | $I_{CBO}$ | $V_{CB}$=30V $I_E$=0 | | | 0.1 | A |
| Emitter Cut-Off Current | $I_{EBO}$ | $V_{EB}$=5.0V $I_C$=0 | | | 0.1 | A |
| DC Current Gain | $h_{FE(1)}$ | $V_{CE}$=1.0V $I_C$=100mA | 100 | | 320 | |
| | $h_{FE(2)}$ | $V_{CE}$=1.0V $I_C$=700mA | 35 | | | |
| Collector-to-Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C$=500mA $I_B$=20mA | | | 0.5 | V |
| Base-to-Emitter Voltage | $V_{BE}$ | $V_{CE}$=1.0V $I_C$=10mA | 0.5 | | 0.8 | V |

CE

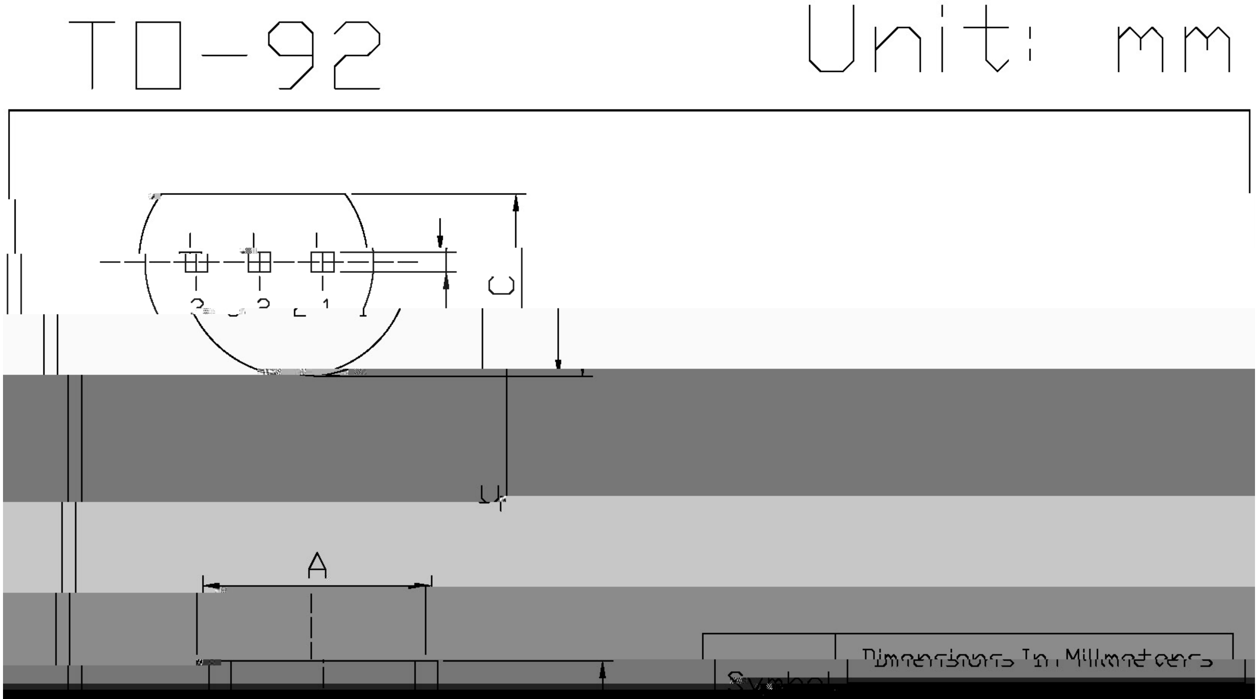
## / Electrical Characteristic Curve



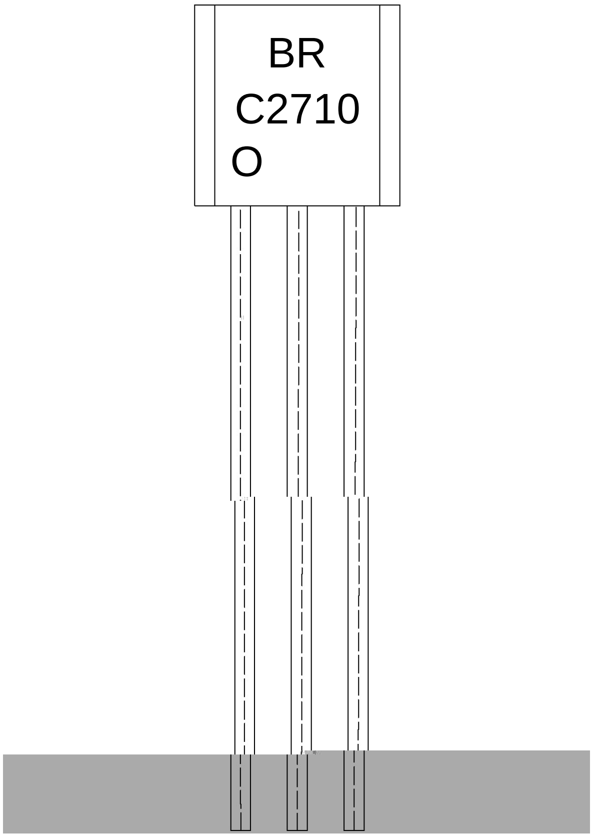




## / Package Dimensions



## / Marking Instructions



BR:

C2710

O: $h_{FE}$

****

Note:

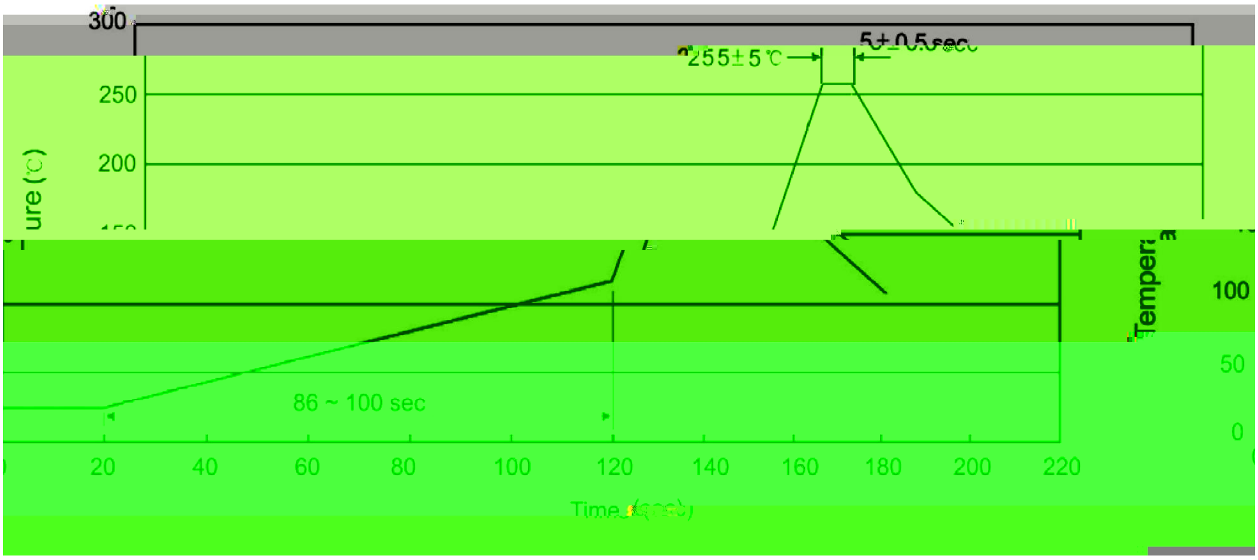
BR: Company Code.

C2710: Product Type.

O: $h_{FE}$ Classifications Symbol

****: Lot No. Code,code change with 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<br>封装形式 | Units 包装数量 | Dimension 包装尺寸 (unit: mm3) |
|---|---|---|