## / Descriptions

TO-92LM PNP Silicon PNP transistor in a TO-92LM Plastic Package.

## / Features

$h_{FE}$ $C_{ob}$ 2SC2910

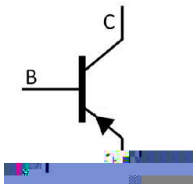
High breakdown voltage, Excellent linearity of $h_{FE}$ and small $C_{ob}$, Fast switching speed complementary pair with 2SC2910.

## / Applications

80W

High voltage switching, Audio 80W output pre-driver applications.

## / Equivalent Circuit




## / Pinning




PIN1 Base PIN 2 Collector PIN 3 Emitter

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

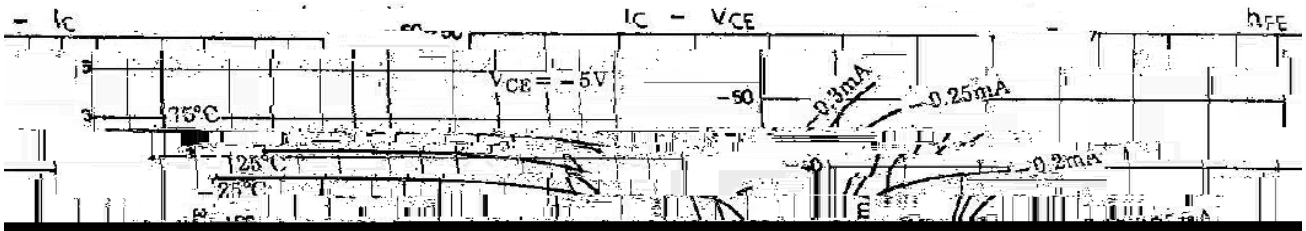
| $h_{FE}$ Classifications Symbol | R | S | T |
|---|---|---|---|
| $h_{FE}$ Range | 100~200 | 140~280 | 200~400 |

## / Absolute Maximum Ratings(Ta=25 )

| Parameter | Symbol | Rating | Unit |
|---|---|---|---|
| Collector to Base Voltage | $V_{CBO}$ | -180 | V |
| Collector to Emitter Voltage | $V_{CEO}$ | -160 | V |
| Emitter to Base Voltage | $V_{EBO}$ | -5.0 | V |
| Collector Current - Continuous | $I_C$ | -70 | mA |
| Collector Current – Continuous(Pulse) | $I_{CP}$ | -140 | mA |
| Collector Power Dissipation | $P_C$ | 900 | mW |
| Junction Temperature | $T_j$ | 150 | |
| Storage Temperature Range | $T_{stg}$ | -55 150 | |

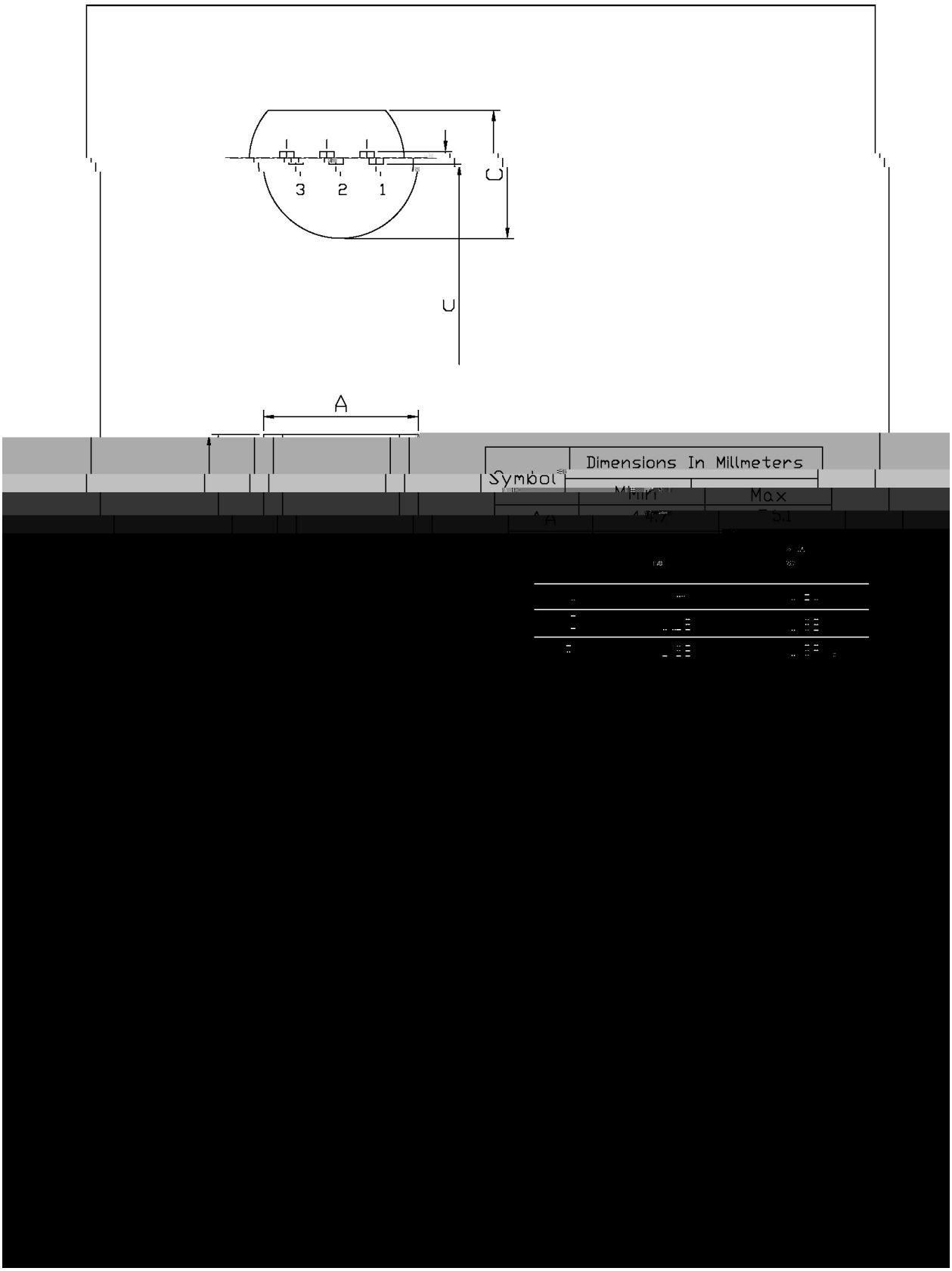
| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|---|---|---|---|---|---|---|
| Collector Cut-Off Current | $I_{CBO}$ | $V_{CB}$=-80V $I_E$=0 | | | -0.1 | μA |
| Emitter Cut-Off Current | $I_{EBO}$ | $V_{CB}$=-4V $I_C$=0 | | | -0.1 | μA |
| DC Current Gain | $h_{FE}$ | $V_{CE}$=-5V $I_C$=-10mA | 100 | | 400 | |
| Transition Frequency | $f_T$ | $V_{CE}$=-10V $I_C$=-10mA | | 150 | | MHz |
| Collector to Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C$=-30mA $I_B$=-3.0mA | | -0.14 | -0.4 | V |
| Collector output capacitance | $C_{ob}$ | $V_{CB}$=-10V f=1.0MHz | | 2.5 | | pF |
| Turn-On Time | $t_{on}$ | $I_C$=-10$I_{B1}$=10$I_{B2}$=-10mA | | 0.1 | | μs |
| Fall Time | $t_f$ | $I_C$=-10$I_{B1}$=10$I_{B2}$=-10mA | | 0.2 | | μs |
| Storage Time | $t_{stg}$ | $I_C$=-10$I_{B1}$=10$I_{B2}$=-10mA | | 1.0 | | μs |

## / Electrical Characteristic Curve



## / Package Dimensions

TO-92LM Unit: mm



## / Marking Instructions




BR:

A1208

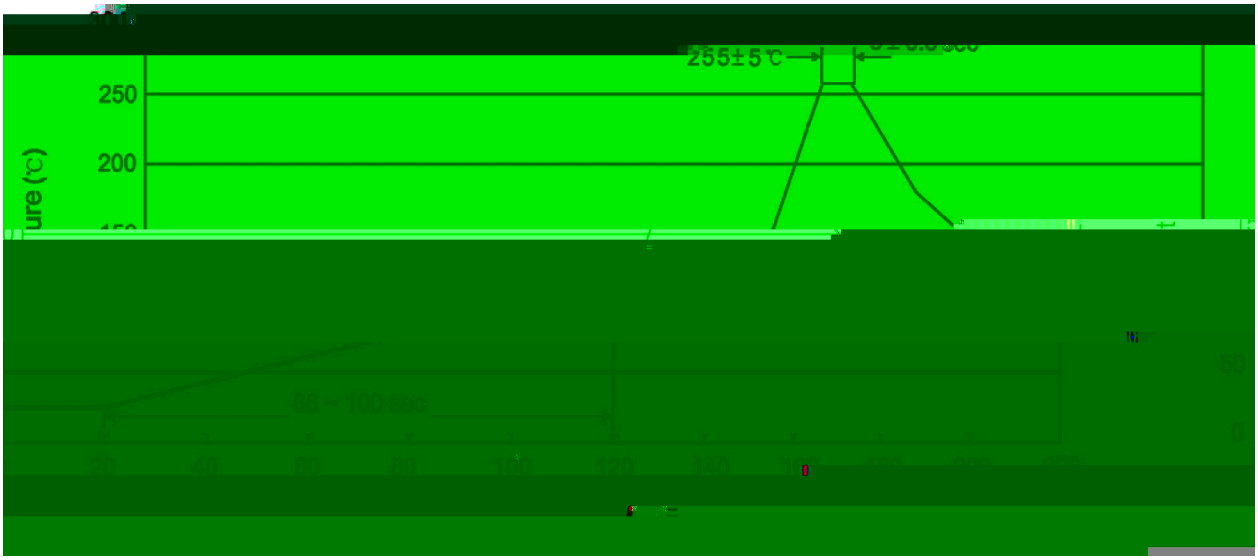
R: $h_{FE}$

****

Note:

| | |
|---|---|
| BR: | Company Code. |
| A1208: | Product Type. |
| R: | $h_{FE}$ 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. | Tf0.56D935.8(5(.7150)]TJ/TT7 | 1 | Tf314.9486 | 0 |