# 2SC2235

Rev.E Mar.-2016

蓝箭电子 BLUE ROCKET ELECTRONICS

**DATA SHEET**

## / Descriptions

WR0<50P ṂṂÞ QSQ ÆṀчs ‖ ㄱ Silicon NPN transistor in a TO-92LM Plastic Package.

## / Features

лъ 5VD<98 Йꞌ

Complementary to 2SA965.

## / Applications

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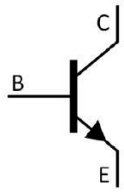
Audio frequency amplifier and driver stage amplifier Applications.

## / Equivalent Circuit




## / Pinning

PIN1 χ Base PIN 2 χ Collector PIN 3 χ Emitter

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

| $h_{FE}$ Classifications Symbol | O | Y |
|---|---|---|
| $h_{FE}$ Range | 80 160 | 120 240 |

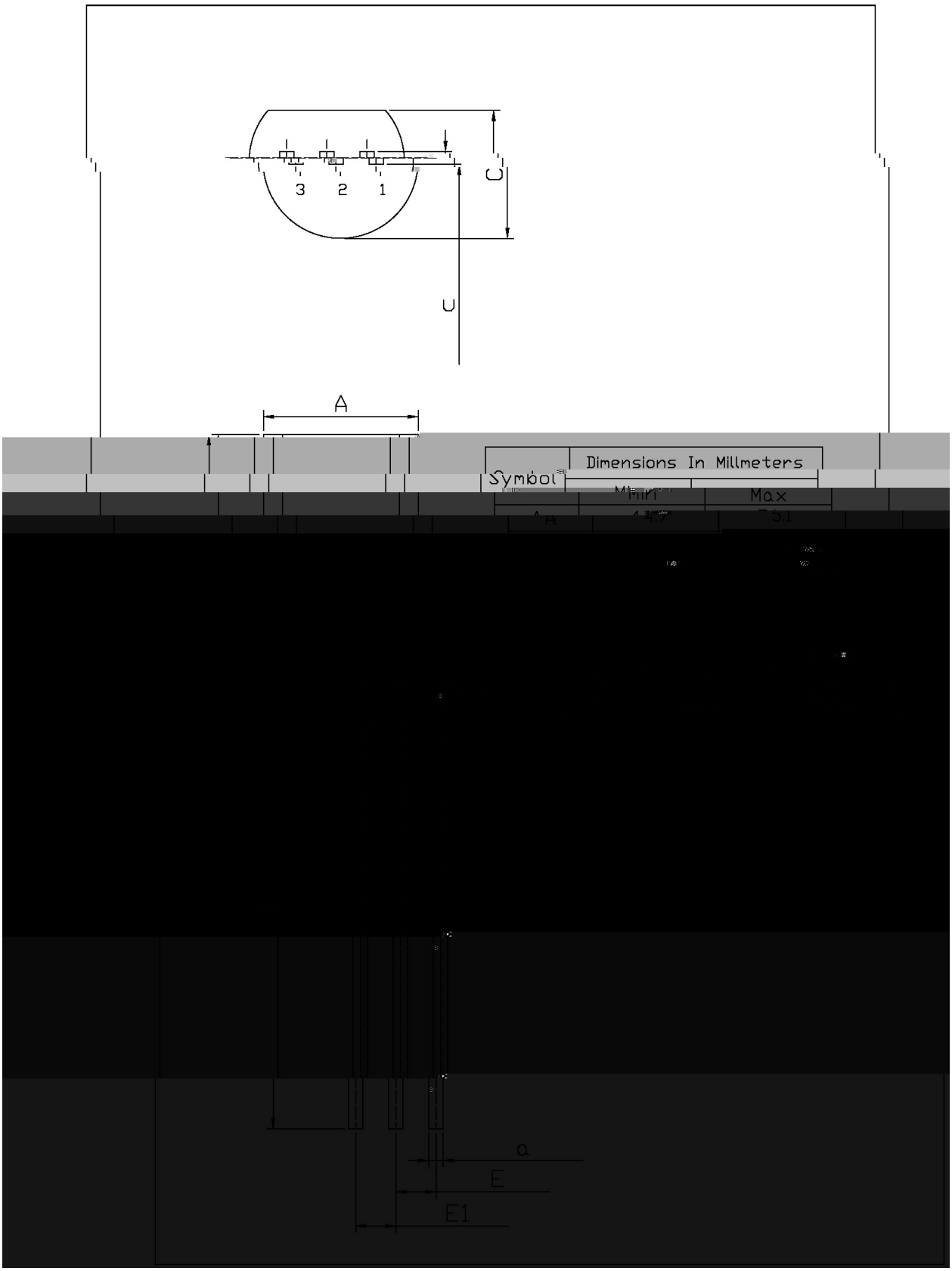
| v ˈQ<br>Parameter | ʏ N<br>Symbol | ˈQ Ö<br>Rating | D Ꮋ<br>Unit |
|---|---|---|---|
| Collector to Base Voltage | $V_{CBO}$ | 120 | V |
| Collector to Emitter Voltage | $V_{CEO}$ | 120 | V |
| Emitter to Base Voltage | $V_{EBO}$ | 5.0 | V |
| Collector Current (DC) | $I_C$ | 800 | mA |
| Emitter Current | $I_E$ | -800 | mA |
| Collector Power Dissipation | $P_C$ | 900 | mW |
| Junction Temperature | $T_j$ | 150 | |
| Storage Temperature Range | $T_{stg}$ | -55 150 | |

| v ˈQ<br>Parameter | ʏ N<br>Symbol | ᏻ : ᛏ ᛉ<br>Test Conditions | ᾠ ᾐ Ö<br>Min | Ɛ ʒ Ö<br>Typ | ᾠ ᶻ Ö<br>Max | D Ꮋ<br>Unit |
|---|---|---|---|---|---|---|
| Collector to Emitter Breakdown Voltage | $V_{CEO}$ | $I_C$=10mA $I_B$=0 | 120 | | | V |
| Emitter to Base Breakdown Voltage | $V_{EBO}$ | $I_E$=1.0mA $I_C$=0 | 5.0 | | | V |
| Collector Cut-Off Current | $I_{CBO}$ | $V_{CB}$=120V $I_E$=0 | | | 0.1 | μA |
| Emitter Cut-Off Current | $I_{EBO}$ | $V_{EB}$=5.0V $I_C$=0 | | | 0.1 | μA |

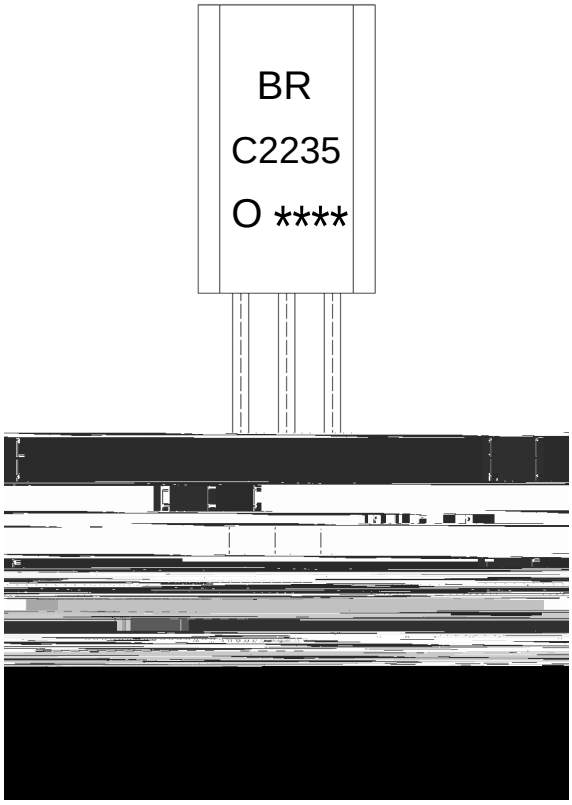
DC Current Gain CBEM

## / Package Dimensions

TO-92LM Unit: mm



## / Marking Instructions




| | |
|---|---|
| ب ″ χ | |
| EU= | ₩ ३ И Ґ |
| F5568 χ | ₩ ʒ N Ґ |
| R= | ₩ k ıн ‘ 6 Ґ |
| ---- χ | ₩ ı ғ ń N Ґ ı ₰ ı ғ ń N Ψ ק |
| Note: | |
| BR: | Company Code. |
| C2235: | Product Type. |
| O: | $h_{FE}$ Classifications Symbol |
| ****: | Lot No. Code,code change with Lot No. |

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

ب ˝ χ

1 Ĺ ♬ □ ỷ 25 Ḱ 150 ɬ ı ˋH ڑ 60 Ḱ 90sec;

2 Š Ө □ ỷ 255 ° 5 ɬ ı ˋH ڑ ˋY ﾊ ᠷ 5 ° 0.5sec;

3 ì ˙ ϒ ˛ ɔ ଌ ỷ ᠷ 2 Ḱ 10 ɬ /sec.

Note:

1.Preheating:25~150 ɬ , Time:60~90sec.

2.Peak Temp.:255 ° 5 ɬ , Duration:5 ° 0.5sec.

3. Cooling Speed: 2~10 ɬ /sec.

## / Resistance to Soldering Heat Test Conditions

| | | | |
|---|---|---|---|
| □ ỷ χ 270 ° 5 ɬ | ˋH ڑ χ 10 ° 1 sec. | Temp.:270±5 | Time:10±1 sec |

## / Packaging SPEC.

ˈQ ţ ɣ Ł / BULK