## / Descriptions

WR0585 Ṃ Ṃ Ŀ QSQ Æ Ṁ ɥ s ǁ ˥ Silicon NPN transistor in a TO-252 Plastic Package.

## / Features

Ḩ $V_{CEO}$ ı ᴀ ɔ ᴌ ɯ `

Low Collector Emitter Saturation Voltage, High Current Gain.

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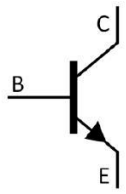
Low power audio amplifier, Low current, high speed switching applications.






PIN1 χ Base PIN 2,4 χ Collector PIN 3 χ Emitter

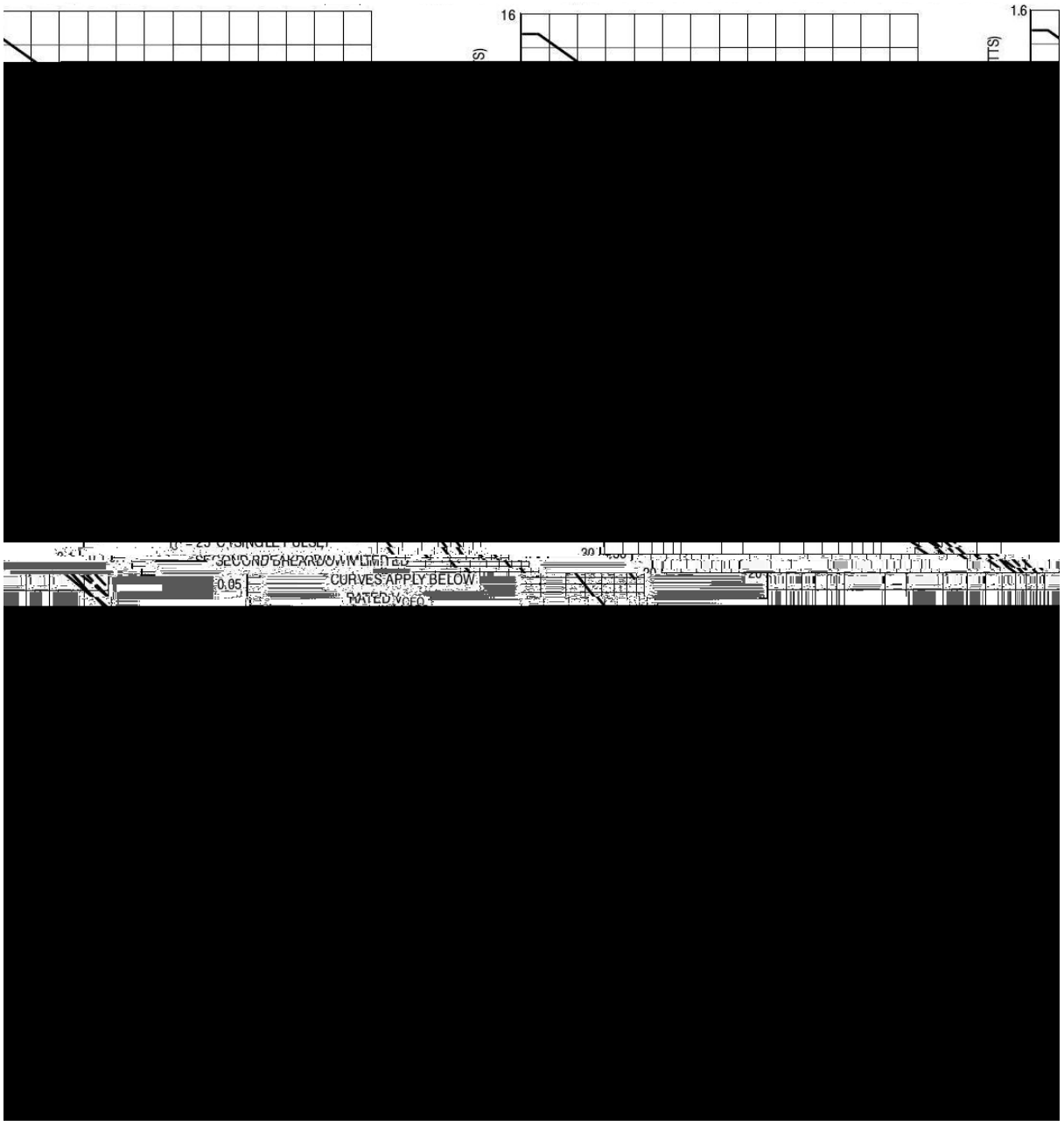
## / $h_{FE}$ Classifications & Marking

ð ʍ ˥ ب ˝ See Marking Instructions.

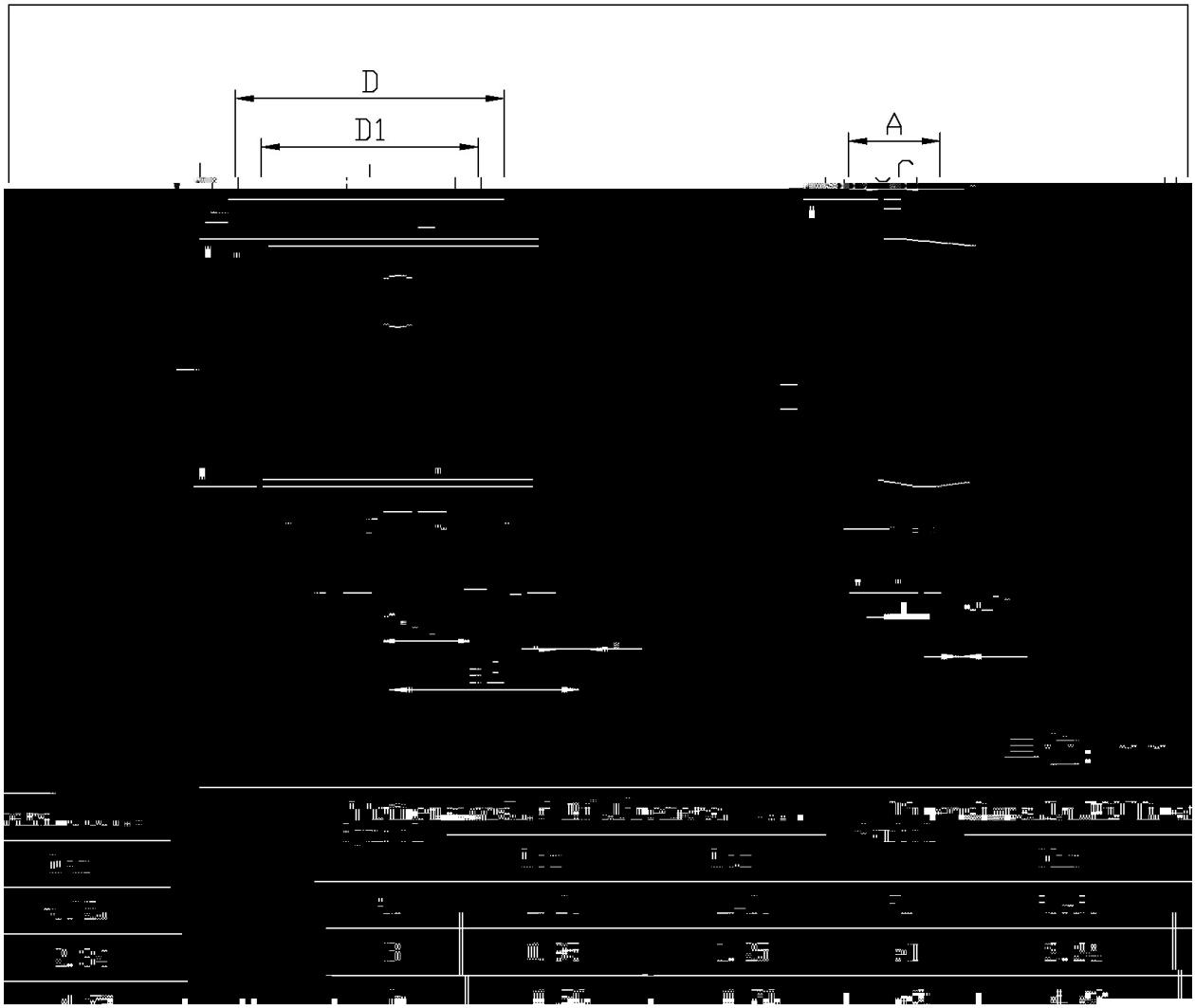
| v ̈Ω̣<br>Parameter | ɬ N<br>Symbol | ̈Ω̣Ö<br>Rating | D Ḫ<br>Unit |
|---|---|---|---|
| Collector to Base Voltage | $V_{CBO}$ | 100 | V |
| Collector to Emitter Voltage | $V_{CEO}$ | 100 | V |
| Emitter to Base Voltage | $V_{EBO}$ | 7.0 | V |
| Collector Current - Continuous | $I_{C(1)}$ | 4.0 | A |
| Peak Collector Current - Continuous | $I_{C(2)}$ | 8.0 | A |
| Base Current - Continuous | $I_B$ | 10 | A |
| Collector Power Dissipation | $P_D$ | 1.4 | W |
| Collector Power Dissipation | $P_D$(Tc=25 ) | 12.5 | W |
| Junction Temperature | $T_j$ | 150 | |
| Storage Temperature Range | $T_{stg}$ | -55 150 | |

| v ̈Ω̣<br>Parameter | ɬ N<br>Symbol | ⊥⊥ ;ǂ T<br>Test Conditions | ω̣ ṇ Ö<br>Min | Ɛ ʒ Ö<br>Typ | ω̣ ʑ Ö<br>Max | D Ḫ<br>Unit |
|---|---|---|---|---|---|---|
| Collector to Emitter Breakdown Voltage | $V_{CEO}$ | $I_C$=10mA $I_B$=0 | 100 | | | V |
| Collector Cut-Off Current | $I_{CBO(1)}$ | $V_{CB}$=100V $I_E$=0 | | | 0.1 | A |
| | $I_{CBO(2)}$ | $V_{CE}$=100V Tc=125 | | | 0.1 | mA |
| Emitter Cut-Off Current | $I_{EBO}$ | $V_{EB}$=-7.0V $I_C$=0 | | | 0.1 | A |
| DC Current Gain | $h_{FE(1)}$ | $V_{CE}$=1.0V $I_C$=200mA | 40 | | 180 | |
| | $h_{FE(2)}$ | $V_{CE}$=1.0V $I_C$=1.0A | 15 | | | |
| Collector to Emitter Saturation Voltage | $V_{CE(sat)\ (1)}$ | $I_C$=500mA $I_B$=50mA | | | 0.3 | V |

## / Electrical Characteristic Curve

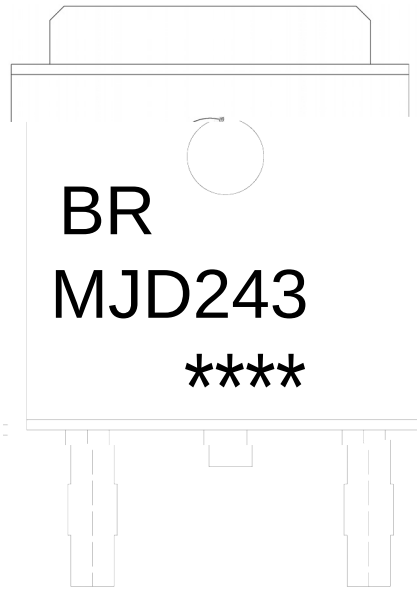


## / Package Dimensions






## / Marking Instructions

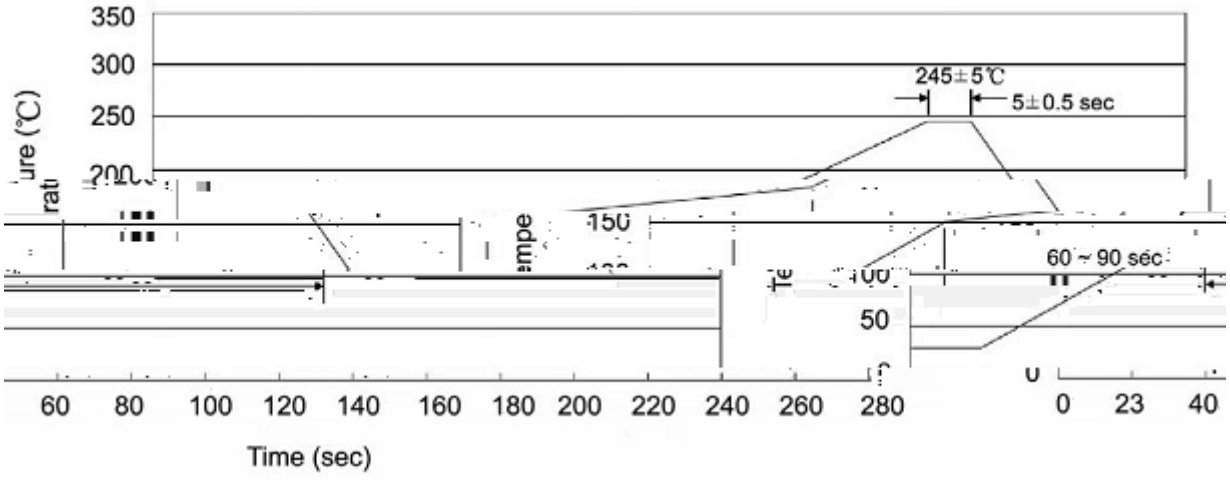



| | |
|---|---|
| BR | |
| PMG576 | |
| ---- | |

Note:

| | |
|---|---|
| BR: | Company Code |
| MJD243: | Product Type. |
| ****: | Lot No. Code, code change with Lot No. |

## ( ) / Temperature Profile for IR Reflow Soldering(Pb-Free)




ب ˝ χ

1 ⺊ ♬ □ ỷ 25 Ḱ 150 ɫ ı `H ڑ 60 Ḱ 90sec;

2 Š Ö □ ỷ 245 ° 5 ɫ ı `H ڑ ˋY ⺈ ⺮ 5 ° 0.5sec;

3 ì ˙ ⺈ ˛ ɔ ⺌ ỷ ⺮ 2 Ḱ 10 ɫ /sec.

Note:

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

2.Peak Temp.:245 ° 5 ɫ , Duration:5 ° 0.5sec.

3. Cooling Speed: 2~10 ɫ /sec.

## / Resistance to Soldering Heat Test Conditions

□ ỷ χ 260 ° 5 ɫ `H ڑ χ 10 ° 1 sec. Temp.:260±5 Time:10±1 sec

## / Packaging SPEC.

ɔ` γ ⺊ / REEL

| Package Type | Units | | | | | Dimension (unit mm$^3$) | | |
|---|---|---|---|---|---|---|---|---|
| | Units/Reel / | Reels/Inner Box / | Units/Inner Box / | Inner Boxes/Outer Box / | Units/Outer Box / | Reel | Inner Box | Outer Box |
| TO-252 | 2,500 | 2 | 5,000 | 5 | 25,000 | 13 ×16 | 360×360×50 | 385×257×392 |