

## / Descriptions

Silicon NPN transistor in a SOT-23 Plastic Package.

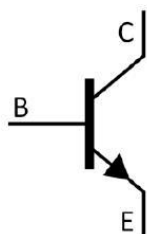
## / Features

High  $I_C$ , high  $h_{FE}$ .

## / Applications

Use in audio output driver stage amplifier applications.

## / Equivalent Circuit



## / Pinning



PIN1 Base

PIN 2 Emitter

PIN 3 Collector

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

| $h_{FE}$ Classifications<br>Symbol | B       | C       | D        |
|------------------------------------|---------|---------|----------|
| $h_{FE}$ Range                     | 300~550 | 500~700 | 650~1000 |
| Marking                            | H28B    | H28C    | H28D     |

| Parameter                      | Symbol    | Rating  | Unit |
|--------------------------------|-----------|---------|------|
| Collector to Base Voltage      | $V_{CBO}$ | 40      | V    |
| Collector to Emitter Voltage   | $V_{CEO}$ | 20      | V    |
| Emitter to Base Voltage        | $V_{EBO}$ | 6.0     | V    |
| Collector Current - Continuous | $I_C$     | 1.0     | A    |
| Collector Power Dissipation    | $P_C$     | 400     | mW   |
| 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    | $V_{CBO}$   | $I_C=0.1mA$ $I_E=0$       | 40  |     |      | V       |
| Collector to Emitter Breakdown Voltage | $V_{CEO}$   | $I_C=1.0mA$ $I_B=0$       | 20  |     |      | V       |
| Emitter to Base Breakdown Voltage      | $V_{EBO}$   | $I_E=0.1mA$ $I_C=0$       | 6.0 |     |      | V       |
| Collector Cut-Off Current              | $I_{CBO}$   | $V_{CB}=40V$ $I_E=0$      |     |     | 1.0  | $\mu A$ |
| Emitter Cut-Off Current                | $I_{CEO}$   | $V_{CE}=20V$ $I_B=0$      |     |     | 5.0  | $\mu A$ |
| Emitter Base Cut-Off Current           | $I_{EBO}$   | $V_{EB}=5.0V$ $I_C=0$     |     |     | 0.1  | $\mu A$ |
| DC Current Gain                        | $h_{FE(1)}$ | $V_{CE}=1.0V$ $I_C=100mA$ | 300 |     | 1000 |         |
|                                        | $h_{FE(2)}$ | $V_{CE}=1.0V$ $I_C=500mA$ | 300 |     |      |         |
|                                        | $h_{FE(3)}$ | $V_{CE}=1.0V$ $I_C=300mA$ | 300 |     |      |         |
|                                        | $h_{FE(4)}$ | $V_{CE}=1.0V$ $I_C=1.0mA$ | 290 |     |      |         |

# M28M

Rev.F Apr.-2017

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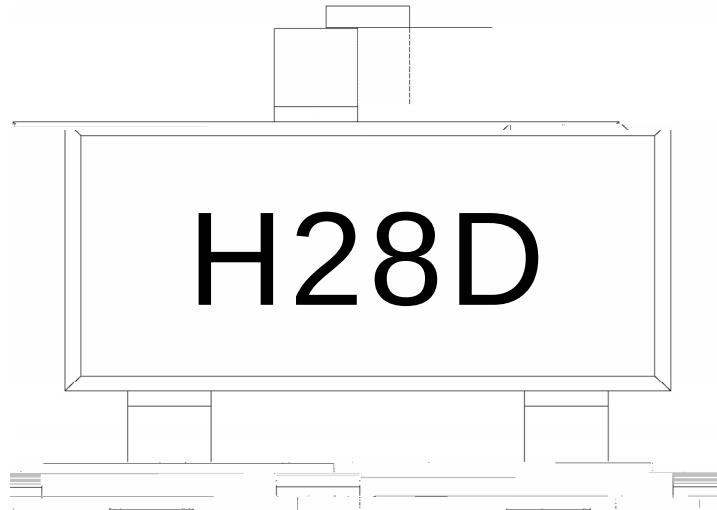
/ Package Dimensions

SOT-23

单位: mm



/ Marking Instructions



H

28

D             $h_{FE}$

Note:

H:            Company Code.

28:           Product Type.

D:             $h_{FE}$  Classifications Symbol.

