

**/ Descriptions**

Silicon NPN transistor in a SOT-323 Plastic Package.

**/ Features**

High  $P_C$  and  $h_{FE}$ , excellent  $h_{FE}$  linearity, complementary pair with 9012W.

**/ Applications**

Amplifier of portable radios in class B push-pull operation.

**/ Equivalent Circuit**



**/ Pinning**



PIN1 Emitter      PIN 2 Base      PIN 3 Collector

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

| $h_{FE}$ Classifications Symbol | D     | E      | F      | G       | H       | I       |
|---------------------------------|-------|--------|--------|---------|---------|---------|
| $h_{FE}$ Range                  | 64 91 | 78 112 | 96 135 | 112 166 | 144 202 | 188 276 |
| Marking                         | HJ3D  | HJ3E   | HJ3F   | HJ3G    | HJ3H    | HJ3I    |

| Parameter                    | Symbol    | Rating  | Unit |
|------------------------------|-----------|---------|------|
| Collector to Base Voltage    | $V_{CBO}$ | 40      | V    |
| Collector to Emitter Voltage | $V_{CEO}$ | 20      | V    |
| Emitter to Base Voltage      | $V_{EBO}$ | 5.0     | V    |
| Collector Current            | $I_C$     | 500     | mA   |
| Base Current                 | $I_B$     | 100     | mA   |
| Collector Power Dissipation  | $P_C$     | 350     | mW   |
| Junction Temperature         | $T_j$     | 150     |      |
| Storage Temperature Range    | $T_{stg}$ | -55 150 |      |

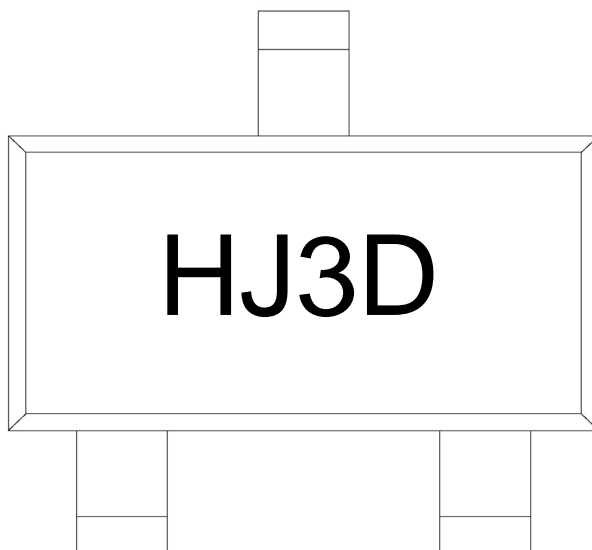
| Parameter                              | Symbol    | Test Conditions     | Min | Typ | Max | Unit |
|--|-----------|---------------------|-----|-----|-----|------|
| Collector to Base Breakdown Voltage    | $V_{CBO}$ | $I_C=0.1mA$ $I_E=0$ | 40  |     |     | V    |
| Collector to Emitter Breakdown Voltage | $V_{CEO}$ | $I_C=1.0mA$ $I_B=0$ | 20  |     |     | V    |

/ Electrical Characteristic Curve





/ Marking Instructions



Note:

$h_{FE}$

Company Code

Product Type Code

$h_{FE}$  Classifications Symbol Code

