

DESCRIPTION

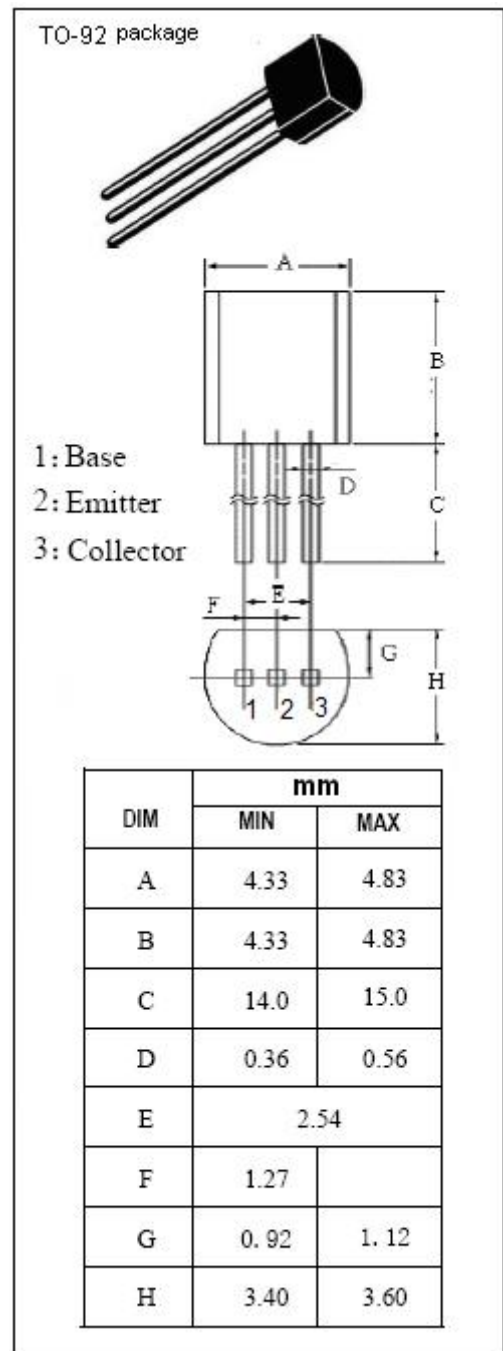
- Low Noise
- High Gain Bandwidth Product
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for use in VHF wide band amplifiers.

ABSOLUTE MAXIMUM RATINGS($T_a=25^\circ\text{C}$)

| SYMBOL | PARAMETER | VALUE | UNIT |
|-----------|---|---------|------------------|
| V_{CBO} | Collector-Base Voltage | 30 | V |
| V_{CEO} | Collector-Emitter Voltage | 20 | V |
| V_{EBO} | Emitter-Base Voltage | 3 | V |
| I_C | Collector Current-Continuous | 300 | mA |
| I_{CM} | Collector Current-Peak | 500 | mA |
| P_C | Collector Power Dissipation @ $T_c=25^\circ\text{C}$ | 0.6 | W |
| T_J | Junction Temperature | 150 | $^\circ\text{C}$ |
| T_{stg} | Storage Temperature Range | -55~150 | $^\circ\text{C}$ |



isc Silicon NPN RF Transistor

2SC4308

ELECTRICAL CHARACTERISTICS

T_c=25°C unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|----------------------|-------------------------------------|--|-----|------|-----|------|
| V _{(BR)CBO} | Collector-Base Breakdown Voltage | I _C = 100 μA ; I _E = 0 | 30 | | | V |
| V _{(BR)CEO} | Collector-Emitter Breakdown Voltage | I _C = 1mA ; R _{BE} = ∞ | 20 | | | V |
| I _{CBO} | Collector Cutoff Current | V _{CB} = 25V ; I _E = 0 | | | 1 | μA |
| I _{EBO} | Emitter Cutoff Current | V _{EB} = 3V ; I _C = 0 | | | 10 | μA |
| h _{FE} | DC Current Gain | I _C = 50mA ; V _{CE} = 5V | 50 | | 200 | |
| f _T | Current-Gain—Bandwidth Product | I _C = 50mA ; V _{CE} = 5V | 1.5 | 2.5 | | GHz |
| C _{OB} | Output Capacitance | I _E = 0 ; V _{CB} = 10V ; f= 1.0MHz | | 4.0 | | pF |

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