

2SD2908 TRANSISTOR (NPN)

FEATURES

Power dissipation

P_{CM} : 0.5 W ($T_{amb}=25^{\circ}C$)

Collector current

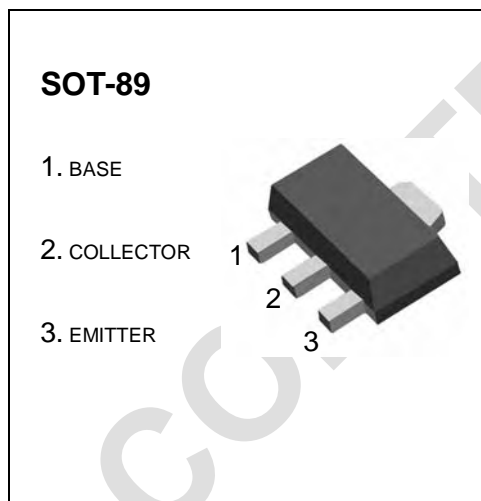
I_{CM} : 5 A

Collector-base voltage

$V_{(BR)CBO}$: 50 V

Operating and storage junction temperature range

T_J, T_{stg} : $-55^{\circ}C$ to $+150^{\circ}C$



ELECTRICAL CHARACTERISTICS ($T_{amb}=25^{\circ}C$ unless otherwise specified)

| Parameter | Symbol | Test conditions | MIN | TYP | MAX | UNIT |
|--------------------------------------|---------------|---------------------------------|-----|-----|-----|---------|
| Collector-base breakdown voltage | $V_{(BR)CBO}$ | $I_C=50\mu A, I_E=0$ | 50 | | | V |
| Collector-emitter breakdown voltage | $V_{(BR)CEO}$ | $I_C=1mA, I_B=0$ | 20 | | | V |
| Emitter-base breakdown voltage | $V_{(BR)EBO}$ | $I_E=50\mu A, I_C=0$ | 6 | | | V |
| Collector cut-off current | I_{CBO} | $V_{CB}=40V, I_E=0$ | | | 0.5 | μA |
| Emitter cut-off current | I_{EBO} | $V_{EB}=5V, I_C=0$ | | | 0.5 | μA |
| DC current gain | $h_{FE(1)}$ | $V_{CE}=2V, I_C=0.5A$ | 120 | | 390 | |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C=4A, I_B=100mA$ | | | 1 | V |
| Transition frequency | f_T | $V_{CE}=6V, I_C=50mA, f=100MHz$ | | 150 | | MHz |
| Collector output capacitance | C_{ob} | $V_{CB}=20V, I_E=0, f=1MHz$ | | 30 | | pF |

CLASSIFICATION OF $h_{FE(1)}$

| Rank | Q | R |
|---------|---------|---------|
| Range | 120-270 | 180-390 |
| Marking | AHQ | AHR |