

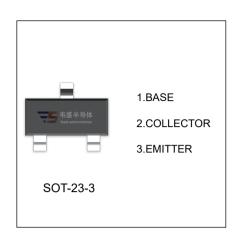
2SC2712 TRANSISTOR (NPN)

FEATURE

- · Audio Frequency General Purpose Amplifier Applications
- · Low Noise: NF=1 dB (Typ),10dB(MAX)
- · Complementary to 2SA1162

MAXIMUM RATINGS (T₂=25°C unless otherwise noted)

| Symbol | Parameter | Value | Unit |
|----------------------------------|--|---------|------|
| V _{CBO} | Collector-Base Voltage | 60 | V |
| V _{CEO} | Collector-Emitter Voltage | 50 | V |
| V _{EBO} | Emitter-Base Voltage | 5 | V |
| Ic | Collector Current -Continuous | 150 | mA |
| Pc | Collector Power Dissipation | 150 | mW |
| T _J ,T _{stg} | Operation Junction and Storage Temperature Range | -55-150 | ℃ |



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

| Parameter | Symbol | Test conditions | Min | Тур | Max | Unit |
|--------------------------------------|----------------------|---|-----|-----|------|------|
| Collector-base breakdown voltage | V _{(BR)CBO} | I _C = 100μA, I _E =0 | 60 | | | V |
| Collector-emitter breakdown voltage | V _{(BR)CEO} | I _C =1mA ,I _B =0 | 50 | | | V |
| Emitter-base breakdown voltage | V _{(BR)EBO} | I _E = 100μA, I _C =0 | 5 | | | V |
| Collector cut-off current | I _{CBO} | V _{CB} = 60 V, I _E =0 | | | 0.1 | μΑ |
| Emitter cut-off current | I _{EBO} | V _{EB} =5V, I _C =0 | | | 0.1 | μΑ |
| DC current gain | h _{FE} | V _{CE} =6V, I _C =2mA | 70 | | 700 | |
| Collector-emitter saturation voltage | V _{CE(sat)} | I _C = 100mA, I _B =10mA | | 0.1 | 0.25 | V |
| Transition frequency | f⊤ | V _{CE} =10V, I _C = 1mA | 80 | | | MHz |
| Output capacitance | C _{ob} | V _{CB} =10V, I _E =0,f=1 MHz | | 2.0 | 3.5 | pF |
| Noise Figure | NF | V_{CE} =6 V , I_{C} =0.1 m A, f =1 k Hz, Rg=10 k Ω | | 1.0 | 10 | dB |

CLASSIFICATION OF h_{FE}

| Rank | 0 | Υ | GR | BL |
|---------|--------|---------|---------|---------|
| Range | 70-140 | 120-240 | 200-400 | 350-700 |
| Marking | LO | LY | LG | LL |



