

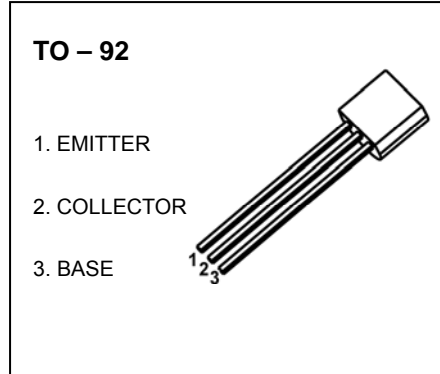


TO-92 Plastic-Encapsulate Transistors

2SC2274 TRANSISTOR (NPN)

FEATURES

- High Breakdown Voltage
- High Current
- Low Saturation Voltage



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

| Symbol | Parameter | Value | Unit |
|------------------|---|----------|------|
| V _{CB0} | Collector-Base Voltage | 60 | V |
| V _{CEO} | Collector-Emitter Voltage | 50 | V |
| V _{EBO} | Emitter-Base Voltage | 5 | V |
| I _C | Collector Current | 0.5 | A |
| P _C | Collector Power Dissipation | 600 | mW |
| R _{θJA} | Thermal Resistance From Junction To Ambient | 208 | °C/W |
| T _j | Junction Temperature | 150 | °C |
| T _{stg} | Storage Temperature | -55~+150 | °C |

ELECTRICAL CHARACTERISTICS (T_a=25°C unless otherwise specified)

| Parameter | Symbol | Test conditions | Min | Typ | Max | Unit |
|--------------------------------------|----------------------|---|-----|-----|-----|------|
| Collector-base breakdown voltage | V _{(BR)CBO} | I _C = 0.01mA, 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 =0.01mA, I _C =0 | 5 | | | V |
| Collector cut-off current | I _{CB0} | V _{CB} =40V, I _E =0 | | | 1 | μA |
| Emitter cut-off current | I _{EBO} | V _{EB} =4V, I _C =0 | | | 1 | μA |
| DC current gain | h _{FE(1)} | V _{CE} =5V, I _C =50mA | 60 | | 320 | |
| | h _{FE(2)} * | V _{CE} =5V, I _C =400mA | 35 | | | |
| Collector-emitter saturation voltage | V _{CE(sat)} | I _C =400mA, I _B =40mA | | | 0.6 | V |
| Base-emitter saturation voltage | V _{BE(sat)} | I _C =400mA, I _B =40mA | | | 1.2 | V |
| Collector output capacitance | C _{ob} | V _{CB} =10V, f=1MHz | | 5 | | pF |
| Transition frequency | f _T | V _{CE} =10V, I _C =10mA | | 120 | | MHz |

*Pulse test

CLASSIFICATION OF h_{FE(1)}

| RANK | D | E | F |
|-------|--------|---------|---------|
| RANGE | 60-120 | 100-200 | 160-320 |

Typical Characteristics

2SC2274

