

SPEC SHEET

2N5294



| | | |
|-----------------|-----------------------|----------------------------|
| Chip Appearance | Chip Size | 1.9mm x 1.9mm |
| | Chip Thickness | 230 ± 20µm |
| | Bonding Pad Dimension | Base 665µm x 315µm |
| | | Emitter 555 µm x 325 µm |
| | Scribe Line Width | 50µm |
| | Top Metal | Al |
| | Back Metal | Ti-Ni-Ag |
| | Raper Size | 4 inch |

Absolute Max Ratings (Ta=25°C)

(TO-220)

| Item | Symbol | Max Ratings | Unit | Note |
|------------------------------------|--------|-------------|------|------|
| Collector-Base Voltage | V CBO | 80 | V | |
| Collector-Emitter Voltage | V CEO | 70 | V | |
| Emitter-Base Voltage | V EBO | 7 | V | |
| Collector Current | I C | 4 | mA | |
| Collector Loss (Power Dissipation) | P C | 36 | W | |
| Junction Temperature | T j | | °C | |
| Storage Temperature | T stg | -65 to +150 | °C | |

Electrical Characteristics (Ta=25°C)

(TO-220)

| Item | Symbol | Min. | Typ. | Max. | Unit | Condition |
|-------------------------------------|-----------|------|------|------|------|---|
| Collector-Base Breakdown Voltage | BV CBO | 80 | - | - | V | I _C = 100 µA |
| Collector-Emitter Breakdown Voltage | BV CEO | 70 | - | - | V | I _C = 200 mA |
| Emitter-Base Breakdown Voltage | BV EBO | 7 | - | - | V | I _E = 100 µA |
| Collector Cut-Off Current | I CBO | - | - | - | µA | V _{CB} = V |
| Emitter Cut-Off Current | I EBO | - | - | 1 | mA | V _{EB} = 7V |
| DC Current Gain | h FE | 30 | - | 120 | - | V _{CE} = 4V, I _C = 500mA |
| Collector Saturation | V CE(SAT) | - | - | 1 | V | I _C = 500mA, I _B = 50mA |

Probing Spec (Ta=25°C)

| No. | Mode | Limit | | | Condition |
|-----|-----------|-------|------|------|---|
| | | Min. | Max. | Unit | |
| 1 | V BE | - | - | V | I _B = |
| 2 | BV CEO | 70 | - | V | I _C = 200mA |
| 3 | I CBO | - | - | µA | V _{CB} = V |
| 4 | I EBO | - | 1 | mA | V _{EB} = 7V |
| 5 | I CEO | - | - | µA | V _{CE} = V |
| 6 | h FE | 30 | 120 | - | V _{CE} = 4V, I _C = 500A |
| 7 | V CE(SAT) | - | 1 | V | I _C = 500mA, I _B = 50mA |

