

isc Silicon PNP Darlingtion Power Transistor

2N6286

DESCRIPTION

- Built-in Base-Emitter Shunt Resistors
- High DC current gain-
 $h_{FE} = 750$ (Min) @ $I_C = -10$ Adc
- Collector-Emitter Sustaining Voltage-
 $V_{CEO(SUS)} = -80V$ (Min)
- Complement to type 2N6283
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

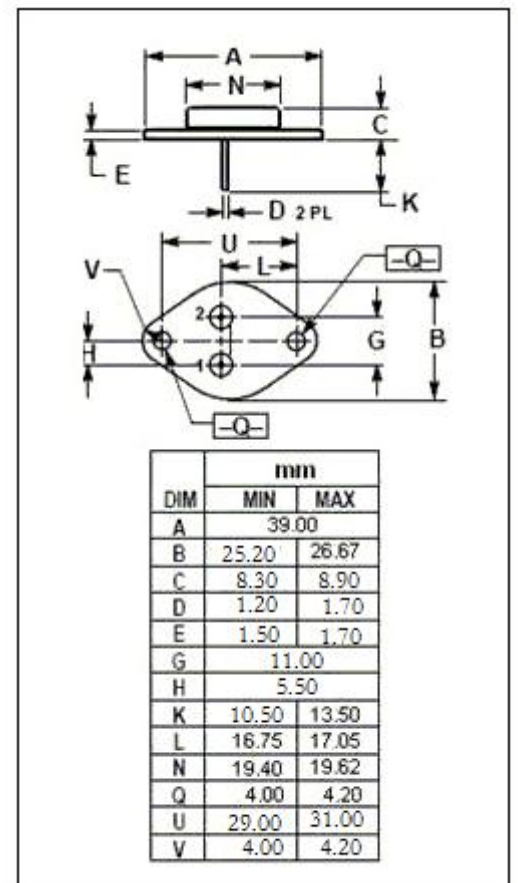
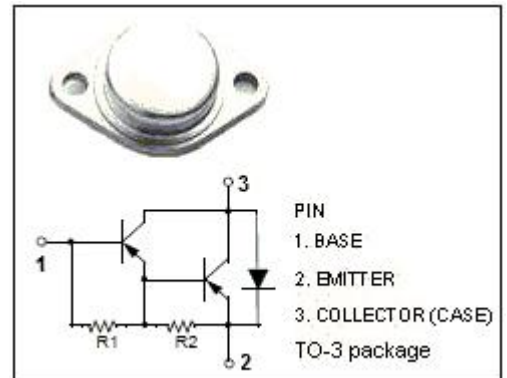
- Intended for general purpose amplifier and low frequency switching applications, such as linear and switching industrial equipment.

ABSOLUTE MAXIMUM RATINGS($T_C=25^\circ C$)

| SYMBOL | PARAMETER | VALUE | UNIT |
|-----------|---|---------|------------|
| V_{CBO} | Collector-Base Voltage | -80 | V |
| V_{CEO} | Collector-Emitter Voltage | -80 | V |
| V_{EBO} | Emitter-Base Voltage | -5.0 | V |
| I_C | Collector Current -Continuous | -20 | A |
| I_{CP} | Collector Current-Peak | -40 | A |
| I_B | Base Current | -0.5 | A |
| P_C | Collector Power Dissipation@ $T_C=25^\circ C$ | 160 | W |
| T_j | Junction Temperature | 150 | $^\circ C$ |
| T_{stg} | Storage Temperature | -65~150 | $^\circ C$ |

THERMAL CHARACTERISTICS

| SYMBOL | PARAMETER | MAX | UNIT |
|---------------|-------------------------------------|------|--------------|
| $R_{th\ j-c}$ | ThermalResistance, Junction to Case | 1.09 | $^\circ C/W$ |



isc Silicon PNP Darlingtion Power Transistor**2N6286****ELECTRICAL CHARACTERISTICS****T_C=25°C unless otherwise specified**

| SYMBOL | PARAMETER | CONDITIONS | MIN | MAX | UNIT |
|------------------------|--------------------------------------|--|-----|-------|------|
| V _{CE0(SUS)} | Collector-Emitter Sustaining Voltage | I _C = -50mA ; I _B = 0 | -80 | | V |
| V _{CE(sat)-1} | Collector-Emitter Saturation Voltage | I _C = -10A; I _B = -40mA | | -2.0 | V |
| V _{CE(sat)-2} | Collector-Emitter Saturation Voltage | I _C = -20A; I _B = -200mA | | -3.0 | V |
| V _{BE(sat)} | Base-Emitter Saturation voltage | I _C = -20A; I _B = -200mA | | -4.0 | V |
| V _{BE(on)} | Base-Emitter On voltage | I _C = -10A; V _{CE} = -3V | | -2.8 | V |
| I _{CEO} | Collector Cutoff current | V _{CE} = -40V; I _B =0 | | -1.0 | mA |
| I _{EBO} | Emitter Cut-off current | V _{EB} = -5V; I _C = 0 | | -2.0 | mA |
| h _{FE-1} | DC Current Gain | I _C = -10A; V _{CE} = -3V | 750 | 18000 | |
| h _{FE-2} | DC Current Gain | I _C = -20A; V _{CE} = -3V | 100 | | |
| C _{OB} | Output Capacitance | I _E = 0; V _{CB} = -10V; f _{test} = 1.0MHz | | 600 | pF |

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