

## isc Silicon PNP Power Transistor

## 2N3186

### DESCRIPTION

- Excellent Safe Operating Area
- With TO-3 package
- Low collector saturation voltage
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

### APPLICATIONS

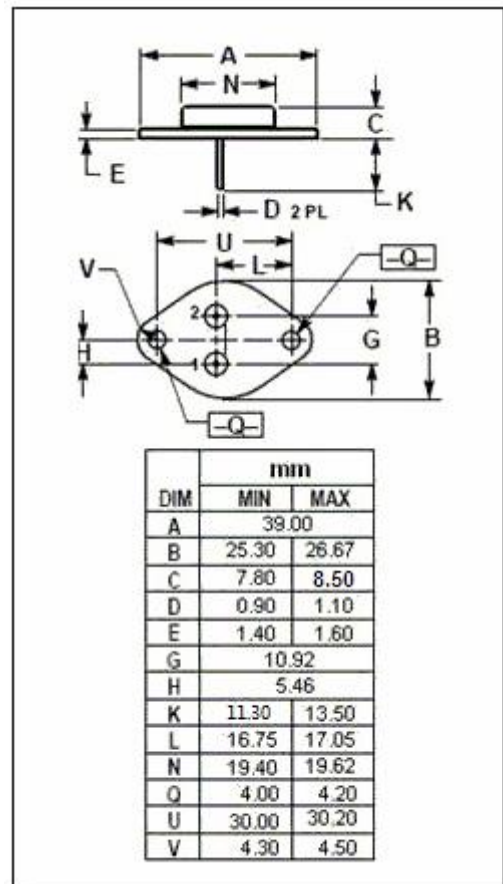
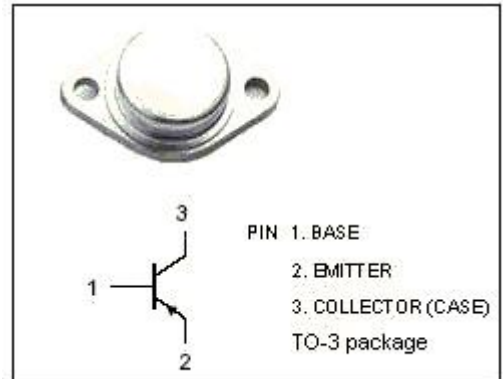
- For medium-speed switching and amplifier applications

### ABSOLUTE MAXIMUM RATINGS( $T_a=25^{\circ}\text{C}$ )

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	-100	V
$V_{CEO}$	Collector-Emitter Voltage	-100	V
$V_{EBO}$	Emitter-Base Voltage	-10	V
$I_C$	Collector Current-Continuous	-5	A
$P_C$	Collector Power Dissipation@ $T_C=25^{\circ}\text{C}$	75	W
$T_J, T_{stg}$	Operating and Storage Junction Temperature Range	-65~+200	$^{\circ}\text{C}$

### THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	1.17	$^{\circ}\text{C/W}$



**isc Silicon PNP Power Transistors****2N3186****ELECTRICAL CHARACTERISTICS****T<sub>C</sub>=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = -2A; I <sub>B</sub> = -0.3A		-1.0	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> = -2A; V <sub>CE</sub> =-0.3V		-2.0	V
I <sub>CEO</sub>	Collector Cutoff Current	V <sub>CE</sub> = -80V; I <sub>B</sub> =0		-5.0	mA
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = -5V; I <sub>C</sub> =0		-1.0	mA
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = -2A ; V <sub>CE</sub> = -3V	10	30	

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