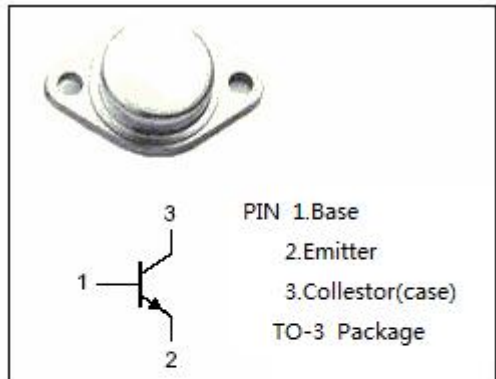


**isc Silicon NPN Power Transistor**
**2N4347**
**DESCRIPTION**

- Excellent Safe Operating Area
- Low Collector-Emitter Saturation Voltage
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation.

**APPLICATIONS**

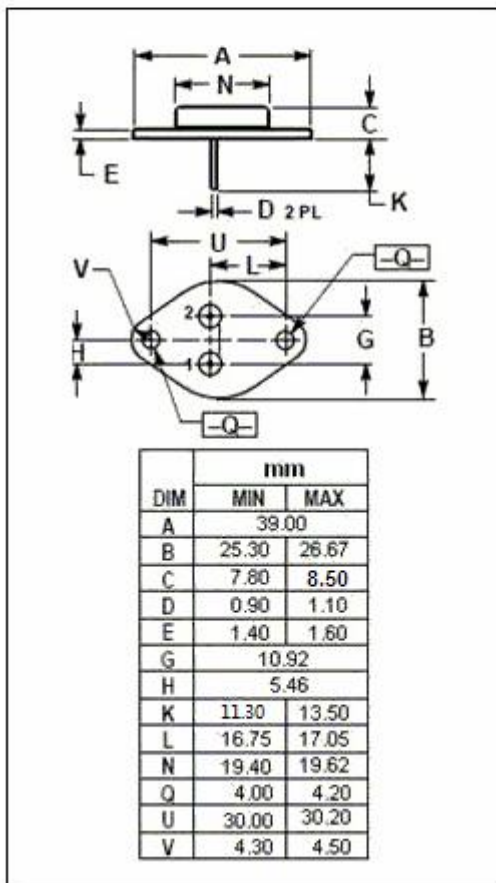
- Designed for application in industrial and commercial equipment including high fidelity audio amplifier, series and shunt regulators and power switches


**ABSOLUTE MAXIMUM RATINGS(T<sub>a</sub>=25°C)**

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>CBO</sub>	Collector-Base Voltage	140	V
V <sub>CEO</sub>	Collector-Emitter Voltage	120	V
V <sub>EBO</sub>	Emitter-Base Voltage	7	V
I <sub>C</sub>	Collector Current-Continuous	5	A
P <sub>C</sub>	Collector Power Dissipation@T <sub>C</sub> =25°C	100	W
T <sub>J</sub>	Junction Temperature	-65~200	°C
T <sub>stg</sub>	Storage Temperature	-65~200	°C

**THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	1.75	°C/W



## isc Silicon NPN Power Transistor

2N4347

## ELECTRICAL CHARACTERISTICS

T<sub>C</sub>=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V <sub>CEO(SUS)</sub> *	Collector-Emitter Sustaining Voltage	I <sub>C</sub> =200mA; I <sub>B</sub> = 0	120		V
I <sub>CEO</sub>	Collector Cutoff Current	V <sub>CE</sub> =100V; I <sub>B</sub> = 0		200	mA
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = 7V; I <sub>C</sub> = 0		5	mA
V <sub>CE(sat)-1</sub> *	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 2A; I <sub>B</sub> = 200mA		1.0	V
V <sub>CE(sat)-2</sub> *	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 5A; I <sub>B</sub> = 630mA		2.0	V
V <sub>BE(ON)-1</sub> *	Base-Emitter On Voltage	I <sub>C</sub> =2A; V <sub>CE</sub> = 4V		2.0	V
V <sub>BE(ON)-2</sub> *	Base-Emitter On Voltage	I <sub>C</sub> =5A; V <sub>CE</sub> = 4V		3.0	V
h <sub>FE-1</sub> *	DC Current Gain	I <sub>C</sub> =2A; V <sub>CE</sub> = 4V	15	60	
h <sub>FE-2</sub> *	DC Current Gain	I <sub>C</sub> = 5A; V <sub>CE</sub> = 4V	10		

\*:Pulse test:Pulse width=300us,duty cycle≤2%

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