

**isc Silicon NPN Power Transistor**
**2SC1140**
**DESCRIPTION**

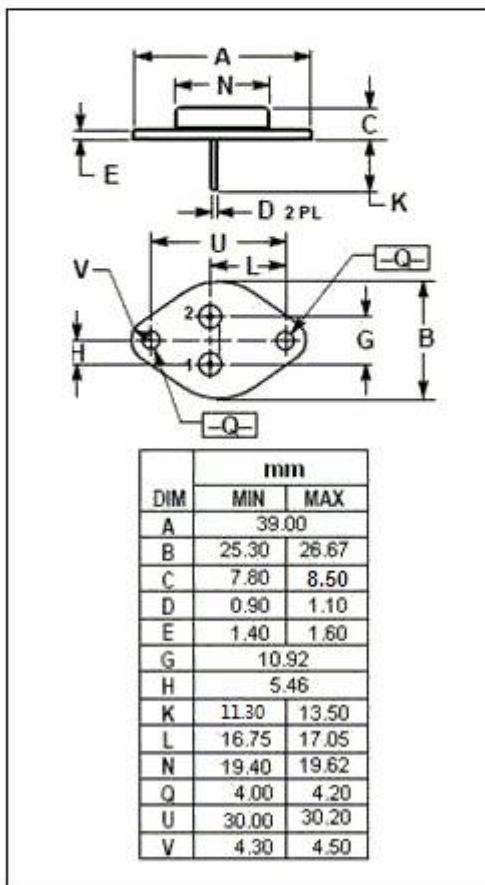
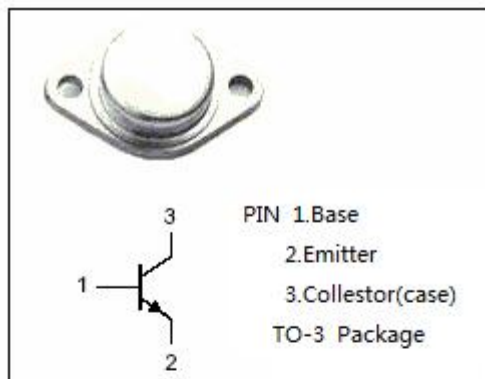
- With TO-3 Package
- High voltage
- Wide area of safe operation
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- For power amplifier applications

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

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>CBO</sub>	Collector-Base Voltage	800	V
V <sub>CEO</sub>	Collector-Emitter Voltage	400	V
V <sub>EBO</sub>	Emitter-Base Voltage	8	V
I <sub>C</sub>	Collector Current-Continuous	15	A
P <sub>C</sub>	Collector Power Dissipation	150	W
T <sub>J</sub>	Junction Temperature	200	°C
T <sub>stg</sub>	Storage Temperature Range	-65~200	°C



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2SC1140

## ELECTRICAL CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 8A; I <sub>B</sub> = 1.6A			1.5	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> = 8A; I <sub>B</sub> = 1.6A			1.6	V
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>C</sub> = 25mA; I <sub>B</sub> = 0	400			V
V <sub>(BR)EBO</sub>	Emitter-Base Breakdown Voltage	I <sub>E</sub> = 1mA; I <sub>C</sub> = 0	7			V
h <sub>FE-1</sub>	DC Current Gain	I <sub>C</sub> =1.0A; V <sub>CE</sub> = 5V	15		50	
h <sub>FE-2</sub>	DC Current Gain	I <sub>C</sub> =7.5A; V <sub>CE</sub> = 5V	10		25	
f <sub>T</sub>	Current-Gain—Bandwidth Product	I <sub>C</sub> = 1.0A; V <sub>CE</sub> = 12V; f <sub>test</sub> = 1MHz	10			MHz

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