

### **isc Silicon NPN Power Transistor**

# 2SC2902

### DESCRIPTION

- Excellent Safe Operating Area
- Low Collector-Emitter Saturation Voltage
- Complement to Type MJ2955
- Minimum Lot-to-Lot variations for robust device Performance and reliable operation.

### APPLICATIONS

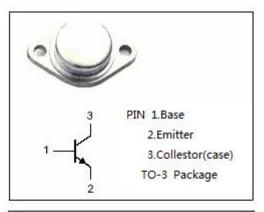
Designed for general-purpose switching and amplifier applications

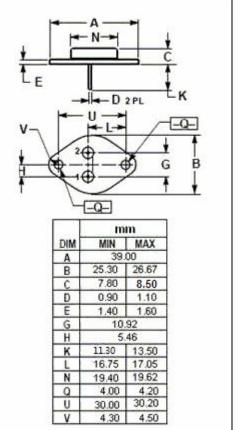
### ABSOLUTE MAXIMUM RATINGS(T<sub>a</sub>=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>CBO</sub>	Collector-Base Voltage	800	V
V <sub>CER</sub>	Collector-Emitter Voltage	800	V
V <sub>CEO</sub>	Collector-Emitter Voltage	400	V
V <sub>EBO</sub>	Emitter-Base Voltage	9	V
lc	Collector Current-Continuous	15	A
IB	Base Current	7	A
Pc	Collector Power Dissipation@Tc=25°C	150	W
T <sub>J,</sub> T <sub>stg</sub>	Operating and Storage Junction Temperature Range	-65~+200	°C

#### THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	1.17	°C/W







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### ELECTRICAL CHARACTERISTICS

#### $T_c=25^{\circ}C$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	МАХ	UNIT
V <sub>CEO(SUS)</sub>	Collector-Emitter Sustaining Voltage	I <sub>C</sub> =30mA ; I <sub>B</sub> =0	400		V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 7.5A; I <sub>B</sub> = 2.5A		1.0	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> = 7.5A; I <sub>B</sub> = 2.5A		1.5	V
I <sub>CEO</sub>	Collector Cutoff Current	V <sub>CE</sub> = 400V; I <sub>B</sub> =0		0.1	mA
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = 9V; I <sub>C</sub> =0		0.1	mA
h <sub>FE</sub>	DC Current Gain	Ic= 7.5A ; Vce= 5V	10	35	

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