

# **isc Silicon NPN Power Transistor**

# **BU932R**

## **DESCRIPTION**

- High Voltage
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

## **APPLICATIONS**

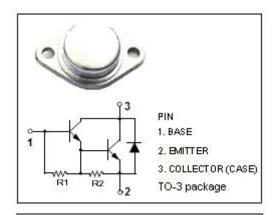
- High ruggedness electronic ignitions
- · High voltage ignition coil driver

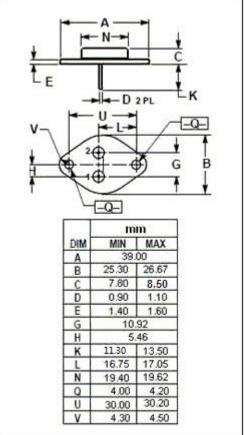
# ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>CBO</sub>	Collector-Base Voltage	500	V
V <sub>CEO</sub>	Collector-Emitter Voltage	450	V
$V_{EBO}$	Emitter-Base Voltage	5	V
Ic	Collector Current	15	Α
I <sub>CM</sub>	Collector Current-peak	30	Α
I <sub>B</sub>	Base Current	1	Α
I <sub>BM</sub>	Base Current-peak	5	Α
Pc	Collector Power Dissipation @T <sub>C</sub> =25°C	175	W
T <sub>j</sub>	Junction Temperature	150	$^{\circ}$ C
T <sub>stg</sub>	Storage Temperature Range	-40~150	°C

### THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	2.08	°C/W







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#### **ELECTRICAL CHARACTERISTICS**

Tc=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>CEO(SUS)</sub>	Collector-Emitter Sustaining Voltage	I <sub>C</sub> = 50mA; I <sub>B</sub> = 0	450			V
V ce(sat)	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 8 A; I <sub>B</sub> = 150mA			1.8	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> = 8 A; I <sub>B</sub> = 150mA			2.2	V
I <sub>CES</sub>	Collector Cutoff Current	V <sub>CE</sub> = 500V;V <sub>BE</sub> = 0 V <sub>CE</sub> = 500V;V <sub>BE</sub> = 0;T <sub>j</sub> = 125°C			1.0 5.0	mA
I <sub>CEO</sub>	Collector Cutoff Current	V <sub>CE</sub> = 450V;I <sub>B</sub> = 0			1.0	mA
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = 5V; I <sub>C</sub> = 0			50	mA
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = 5A; V <sub>CE</sub> = 10V	300			
V <sub>ECF</sub>	C-E Diode Forward Voltage	I <sub>F</sub> = 10A			2.8	V

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