

## isc Silicon NPN Power Transistor

## BU932RPFI

## DESCRIPTION

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

## APPLICATIONS

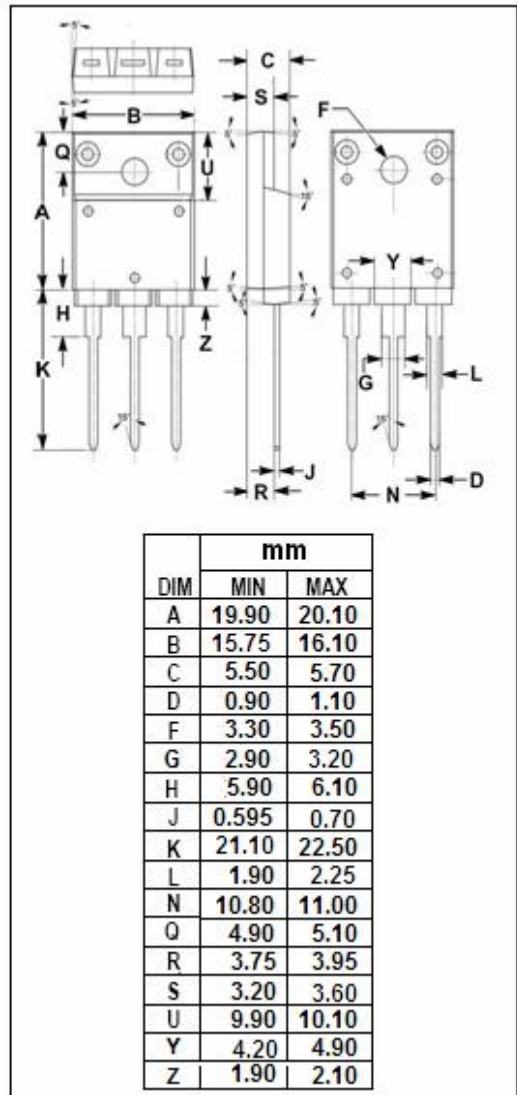
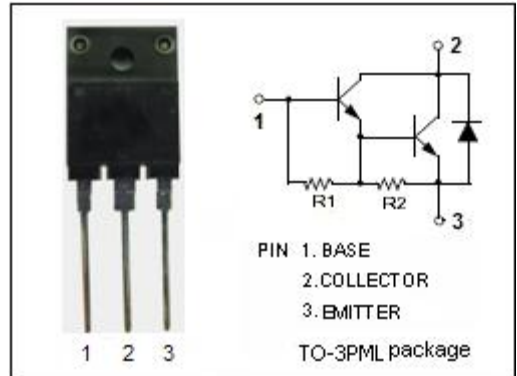
- High ruggedness electronic ignitions
- High voltage ignition coil driver

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	500	V
$V_{CEO}$	Collector-Emitter Voltage	450	V
$V_{EBO}$	Emitter-Base Voltage	5	V
$I_C$	Collector Current	15	A
$I_{CM}$	Collector Current-peak	30	A
$I_B$	Base Current	1	A
$I_{BM}$	Base Current-peak	5	A
$P_C$	Collector Power Dissipation @ $T_c=25^{\circ}\text{C}$	60	W
$T_j$	Junction Temperature	150	$^{\circ}\text{C}$
$T_{stg}$	Storage Temperature Range	-40~150	$^{\circ}\text{C}$

## THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	2.08	$^{\circ}\text{C/W}$



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## ELECTRICAL CHARACTERISTICS

T<sub>c</sub>=25°C 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 <sub>CE(sat)</sub>	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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