

isc Silicon NPN Power Transistor

BU926

DESCRIPTION

- Collector-Emitter Sustaining Voltage-  
:  $V_{CEO(SUS)} = 400V$  (Min)
- Low Saturation Voltage  
:  $V_{CE(sat)} = 1.5V$  (Max) @  $I_C = 5A$

APPLICATIONS

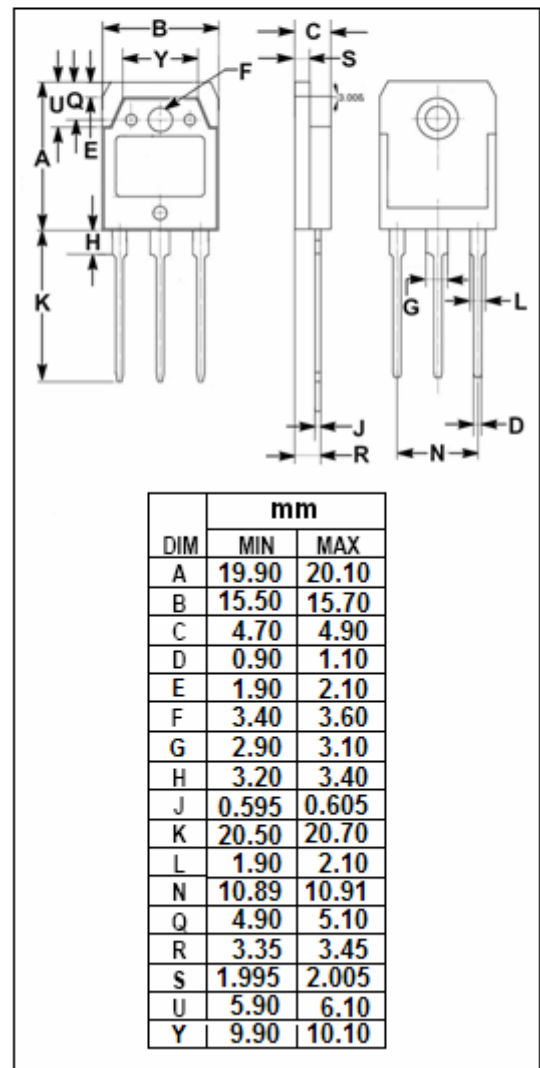
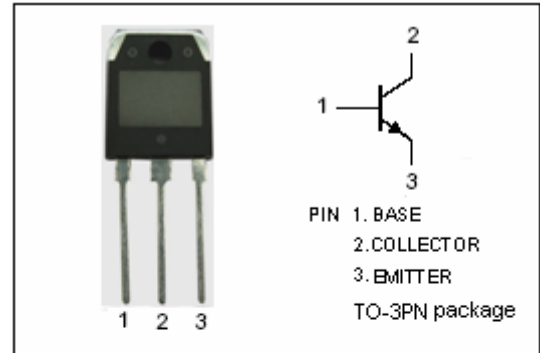
- Designed for use in high-voltage , high-speed , power switching in inductive circuit.

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Base-Emitter Voltage	850	V
$V_{CEO}$	Collector-Emitter Voltage	400	V
$V_{EBO}$	Emitter-Base Voltage	7	V
$I_C$	Collector Current- Continuous	8	A
$I_{CM}$	Collector Current-Peak	10	A
$I_B$	Base Current- Continuous	2	A
$P_C$	Collector Power Dissipation @ $T_C=25^\circ C$	120	W
$T_J$	Junction Temperature	150	$^\circ C$
$T_{stg}$	Storage Temperature Range	-65~150	$^\circ C$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	1.04	$^\circ C/W$



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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> = 100mA; I <sub>B</sub> = 0	400			V
V <sub>CE(sat)-1</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 5A; I <sub>B</sub> = 1A			1.5	V
V <sub>CE(sat)-2</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 8A; I <sub>B</sub> = 2A			5.0	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> = 5A; I <sub>B</sub> = 1A			1.6	V
I <sub>CEX</sub>	Collector Cutoff Current	V <sub>CE</sub> = 850V; V <sub>BE</sub> = -2.5V			0.5	mA
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = 7V; I <sub>C</sub> = 0			1.0	mA
f <sub>T</sub>	Current-Gain—Bandwidth Product	I <sub>C</sub> = 0.2A; V <sub>CE</sub> = 10V; f <sub>test</sub> = 1MHz		4		MHz

## Switching Times

t <sub>on</sub>	Turn-On Time	I <sub>C</sub> = 5A; I <sub>B1</sub> = -I <sub>B2</sub> = 1A; V <sub>CC</sub> = 250V			1.0	μs
t <sub>stg</sub>	Storage Time				3.2	μs
t <sub>f</sub>	Fall Time				0.8	μs