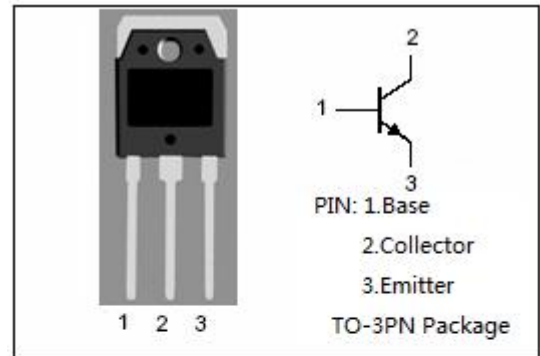


isc Silicon NPN Power Transistor
BU508A
DESCRIPTION

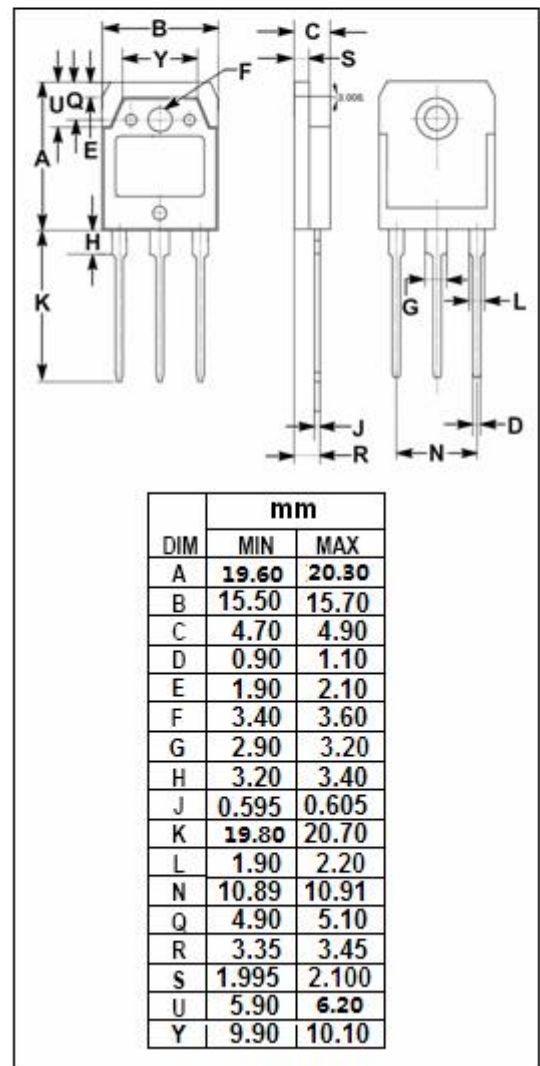
- Collector-Emitter Sustaining Voltage-
: $V_{CEO(SUS)} = 800V$ (Min)
- High Power Dissipation-
: $P_D = 100W @ T_C = 25^\circ C$
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for horizontal output applications.


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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CES}	Collector- Emitter Voltage ($V_{BE} = 0$)	1500	V
V_{CEO}	Collector-Emitter Voltage	800	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current- Continuous	8	A
I_{CM}	Collector Current-Peak	16	A
I_B	Base Current- Continuous	4	A
I_{BM}	Base Current-Peak	6	A
P_C	Collector Power Dissipation @ $T_C = 25^\circ C$	125	W
T_J	Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature Range	-65~150	$^\circ C$



SYMBOL	PARAMETER	MAX	UNIT
R_{th-jc}	Thermal Resistance, Junction to Case	1.0	$^\circ C/W$

isc Silicon NPN Power Transistor

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ELECTRICAL CHARACTERISTICS

T_c=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEO(SUS)}	Collector-Emitter Sustaining Voltage	I _C = 50mA ; I _B = 0	800			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 4.5A; I _B = 2.0A			1.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 4.5A; I _B = 2.0A			1.3	V
I _{CES}	Collector Cutoff Current	V _{CE} = 1500V ; V _{BE} = 0			1	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 6.0V ; I _C = 0			10	mA
h _{FE-1}	DC Current Gain	I _C = 0.1A ; V _{CE} = 5V	6		30	
h _{FE-2}	DC Current Gain	I _C = 4.5A ; V _{CE} = 5V	2.25			
f _T	Current-Gain—Bandwidth Product	I _C = 0.1A; V _{CE} = 5V;		3		MHz

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