

isc Silicon NPN Power Transistor

BU508A-M

DESCRIPTION

- Collector-Emitter Sustaining Voltage-
: $V_{CEO(SUS)} = 800V$ (Min)
- High Power Dissipation-
: $P_D = 100W @ T_C = 25^{\circ}C$

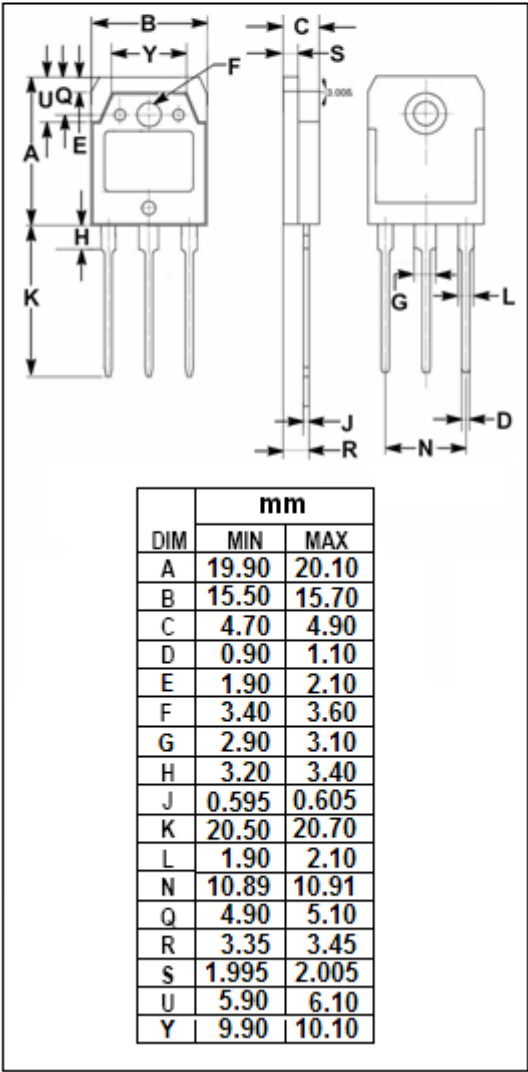
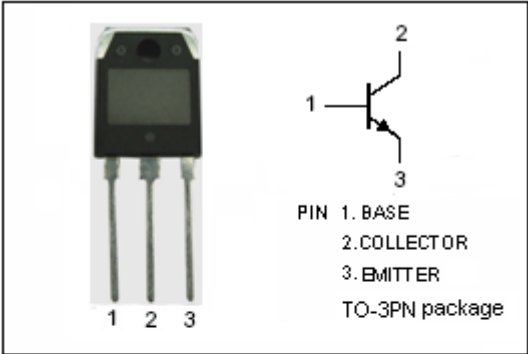
APPLICATIONS

- 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	5	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 @ $T_C=25^{\circ}C$	100	W
T_J	Junction Temperature	150	$^{\circ}C$
T_{stg}	Storage Temperature Range	-65~150	$^{\circ}C$

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



isc Silicon NPN Power Transistor**BU508A-M****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 = 100mA ; 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 = 0.5A ; V _{CE} = 5V	8			
h _{FE-2}	DC Current Gain	I _C = 4A ; V _{CE} = 5V			10	
f _T	Current-Gain—Bandwidth Product	I _C = 0.1A; V _{CE} = 5V;		3		MHz

Switching times

t _f	Fall Time	I _C = 4A , I _{B1} = 0.8A; I _{B2} = -1.6A		0.4		μ s
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