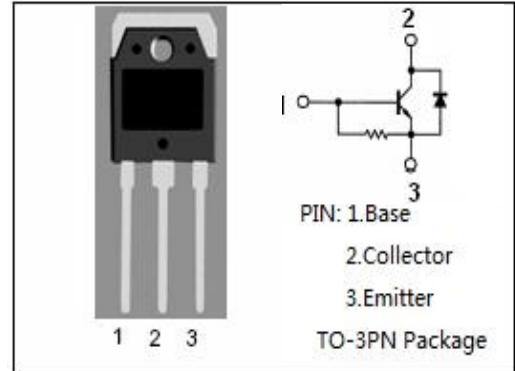


isc Silicon NPN Power Transistor
BU508DR
DESCRIPTION

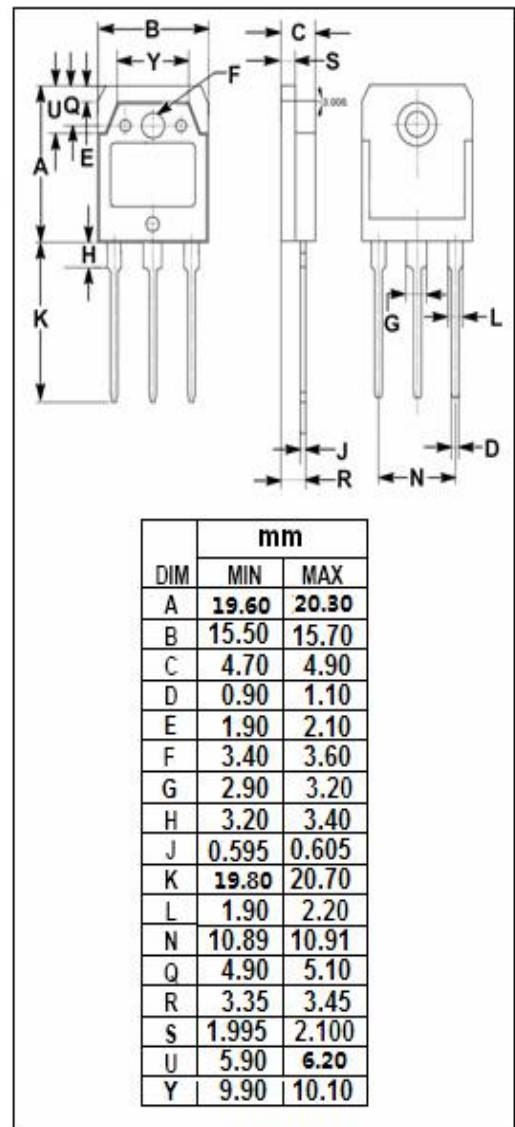
- High Voltage Capability
- High Current Capability
- Fast Switching Speed
- Built-in Integrated Diode
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for use in large screen color deflection circuits .


ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CES}	Collector-Emitter Voltage	1500	V
V _{CEO}	Collector-Emitter Voltage	700	V
V _{EBO}	Emitter-Base Voltage	7	V
I _C	Collector Current-Continuous	8.0	A
I _{CM}	Collector Current-Peak	15	A
I _B	Base Current-Continuous	4	A
I _{BM}	Base Current-Peak	6	A
P _C	Collector Power Dissipation @T _C =25°C	125	W
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-65~150	°C


THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	1.0	°C/W

isc Silicon NPN Power Transistor

BU508DR

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	700			V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = 100mA; I _C = 0	5			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 4.5A; I _B = 1.6A			1.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 4.5A; I _B = 2A			1.5	V
I _{CES}	Collector Cutoff Current	V _{CE} = 1500V; V _{BE} = 0 V _{CE} = 1500V; V _{BE} = 0; T _C = 125°C			0.5 2.0	mA
h _{FE-1}	DC Current Gain	I _C = 2.5A; V _{CE} = 5V	4.5			
h _{FE-2}	DC Current Gain	I _C = 4.5A; V _{CE} = 5V		3.2		
f _T	Current-Gain—Bandwidth Product	I _C = 0.1A; V _{CE} = 5V		7		MHz
V _{ECF}	C-E Diode Forward Voltage	I _F = 4.0A			1.5	V
C _{OB}	Output Capacitance	I _E =0; V _{CB} = 10V; f _{test} = 1MHz		125		pF

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