

isc Silicon NPN Power Transistor

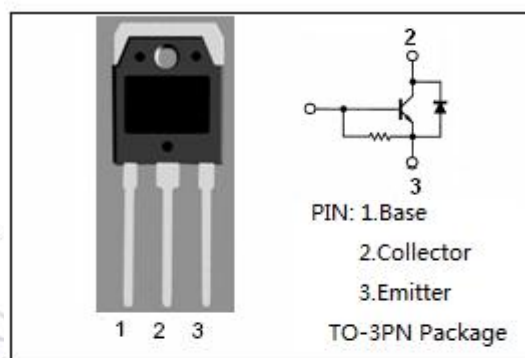
BU508D

DESCRIPTION

- High Voltage
- High Switching Speed
- Built-in damper diode
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for use in horizontal deflection circuits of colour TV receivers.

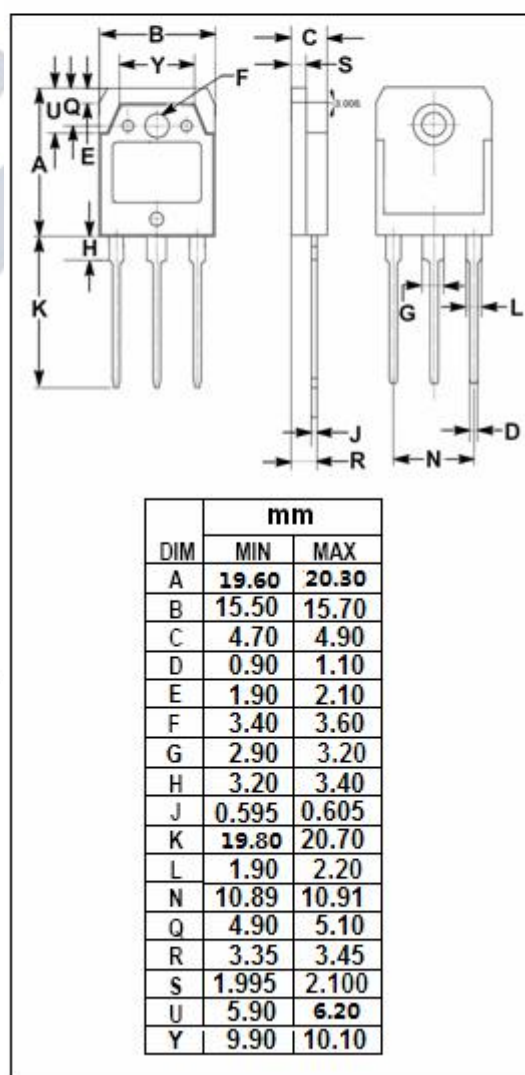


ABSOLUTE MAXIMUM RATINGS (T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CBO}	Collector-Base Voltage	1500	V
V _{CEO}	Collector-Emitter Voltage	700	V
V _{EBO}	Emitter-Base Voltage	5	V
I _C	Collector Current-Continuous	5	A
I _{CM}	Collector Current-Peak	8	A
I _B	Base Current-Continuous	2.5	A
P _C	Collector Power Dissipation @T _C =25°C	125	W
T _j	Junction Temperature	150	°C
T _{stg}	Storage Temperature Range	-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**BU508D****ELECTRICAL CHARACTERISTICS****T_c=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
V _{CEQ(SUS)}	Collector-Emitter Sustaining Voltage	I _C = 50mA; I _B = 0	700			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 4.5A; I _B = 2A			1.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 4.5A; I _B = 2A			1.5	V
h _{FE}	DC Current Gain	I _C = 1A ; V _{CE} = 5V	8			
I _{CES}	Collector Cutoff Current	V _{CE} = 1500V; V _{BE} = 0			1.0	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C = 0			300	mA
V _{ECF}	C-E Diode Forward Voltage	I _F = 4A			2	V
f _T	Transition Frequency	I _C = 0.1A ; V _{CE} = 5V		4		MHz
Cob	Output Capacitance	I _E = 0; V _{CB} = 10V; f _{test} = 1MHz		125		pF

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