

isc Silicon NPN Power Transistor

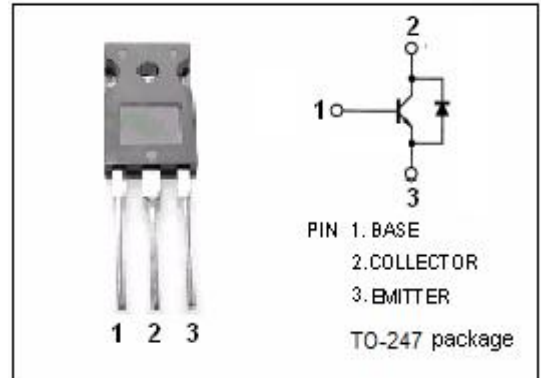
BU508DW

DESCRIPTION

- High Voltage- $V_{CES} = 1500V(\text{Min.})$
- Collector Current- $I_C = 8.0A$
- 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 .

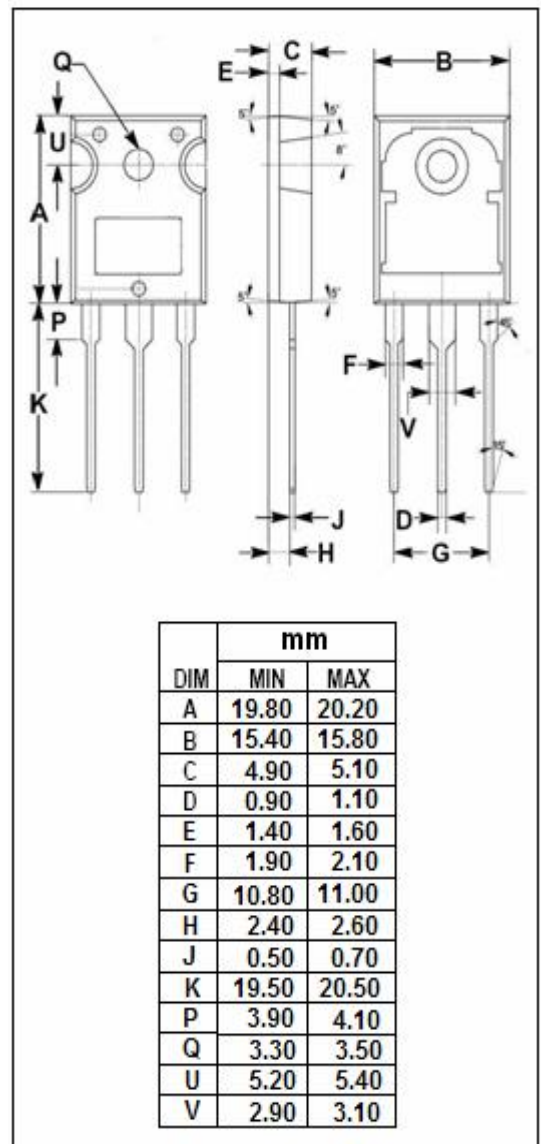


ABSOLUTE MAXIMUM RATINGS($T_a = 25^\circ\text{C}$)

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 @ $T_C = 25^\circ\text{C}$	125	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature	-65~150	$^\circ\text{C}$

THERMAL CHARACTERISTICS

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



isc Silicon NPN Power Transistor**BU508DW****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 _{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			1.1	V
I _{CES}	Collector Cutoff Current	V _{CE} = 1500V; V _{BE} = 0 V _{CE} = 1500V; V _{BE} = 0; T _C = 125°C			1.0 2.0	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5.0V; I _C = 0			1	mA
h _{FE}	DC Current Gain	I _C = 0.1A; V _{CE} = 5V	6		30	
f _T	Current-Gain—Bandwidth Product	I _C = 0.1A; V _{CE} = 5V		7		MHz
V _{ECF}	C-E Diode Forward Voltage	I _F = 4.5A			2.0	V

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