

isc Silicon NPN Power Transistor

BU208D

DESCRIPTION

- High Voltage- $V_{CES}=1500V$ (Min.)
- Collector Current- $I_C=8.0A$
- Built-in Damper Diode

APPLICATIONS

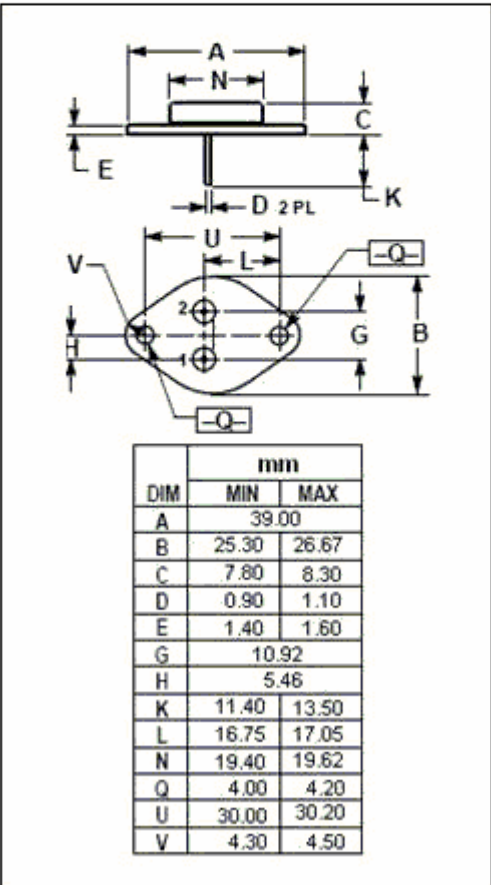
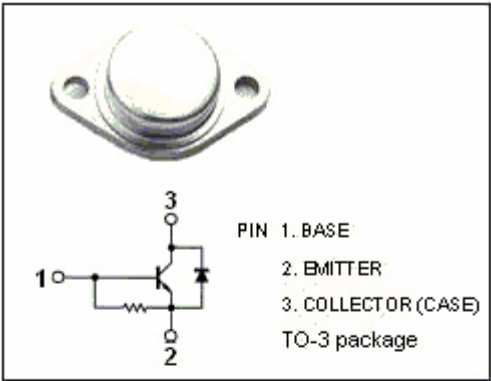
- Designed for use in large screen color deflection circuits .

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CES}	Collector-Emitter Voltage	1500	V
V_{CEO}	Collector-Emitter Voltage	700	V
V_{EBO}	Emitter-Base Voltage	10	V
I_C	Collector Current-Continuous	8.0	A
I_{CM}	Collector Current-Peak	15	A
P_C	Collector Power Dissipation @ $T_C=25^{\circ}C$	150	W
T_J	Junction Temperature	175	$^{\circ}C$
T_{stg}	Storage Temperature	-65~175	$^{\circ}C$

THERMAL CHARACTERISTICS

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



isc Silicon NPN Power Transistor**BU208D****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	$I_C=100\text{mA}; I_B=0$	700			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=4.5\text{A}; I_B=2\text{A}$			1.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=4.5\text{A}; I_B=2\text{A}$			1.3	V
I_{CES}	Collector Cutoff Current	$V_{CE}=1500\text{V}; V_{BE}=0$ $V_{CE}=1500\text{V}; V_{BE}=0; T_C=125^{\circ}\text{C}$			1.0 2.0	mA
I_{EBO}	Emitter Cutoff Current	$V_{EB}=5.0\text{V}; I_C=0$			300	mA
h_{FE}	DC Current Gain	$I_C=1\text{A}; V_{CE}=5\text{V}$	8			
f_T	Current-Gain—Bandwidth Product	$I_C=0.1\text{A}; V_{CE}=5\text{V}; f_{test}=5\text{MHz}$		7		MHz
V_{ECF}	C-E Diode Forward Voltage	$I_F=4\text{A}$			2	V

Switching Times(Inductive load)

t_s	Storage Time	$I_C=4.5\text{A}; I_B=1.8\text{A}; L_B=3\mu\text{H};$ $V_{CC}=140\text{V}, L_C=0.9\text{mH}$		7		μS
t_f	Fall Time			0.55		μS