

isc Silicon NPN Power Transistor

BU108

DESCRIPTION

- High Voltage
- High Switching Speed
- Collector Current- $I_C = 5A$

APPLICATIONS

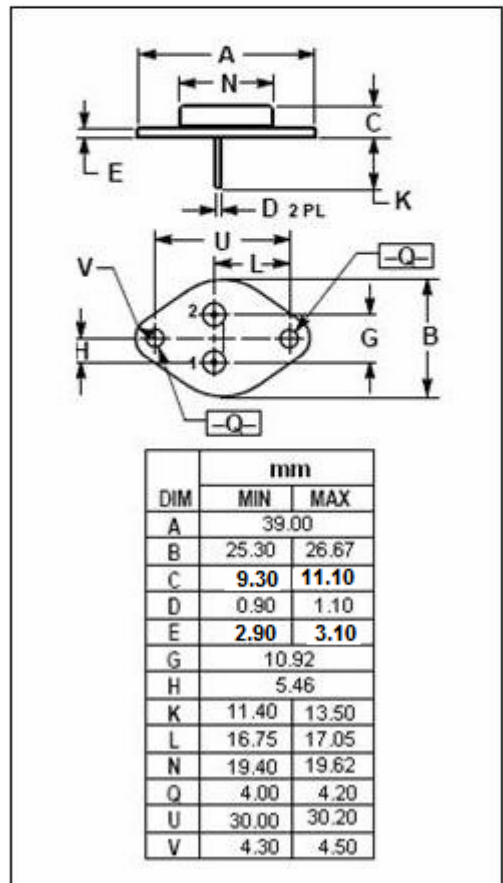
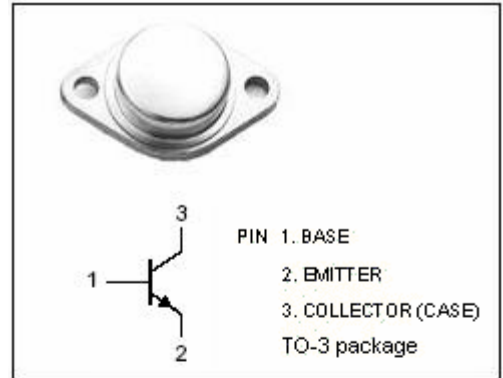
- Designed for high voltage CRT scanning applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	1500	V
V_{CEO}	Collector-Emitter Voltage	750	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	5	A
I_B	Base Current-Continuous	3.5	A
I_E	Emitter Current-Continuous	8.5	A
P_C	Collector Power Dissipation @ $V_{CE} \leq 100V, T_C \leq 95^\circ C$	12.5	W
T_J	Junction Temperature	115	$^\circ C$
T_{stg}	Storage Temperature	-65~115	$^\circ C$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	1.6	$^\circ C/W$



isc Silicon NPN Power Transistor**BU108****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E= 100\text{mA}$; $I_C= 0$	5		V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C= 4.5\text{A}$; $I_B= 2\text{A}$		5.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C= 4.5\text{A}$; $I_B= 2\text{A}$		1.3	V
I_{CEX}	Collector Cutoff Current	$V_{CE}= 1500\text{V}$; $V_{BE}= -2\text{V}$		1.0	mA
I_{CBO}	Collector Cutoff Current	$V_{CB}= 1500\text{V}$; $I_E= 0$		1.0	mA
h_{FE}	DC Current Gain	$I_C= 1\text{A}$; $V_{CE}= 5\text{V}$	8		
t_f	Fall Time	$I_C= 4.5\text{A}$		1.2	μs