

**Silicon NPN Power Transistor**

**BU108**

**DESCRIPTION**

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

**APPLICATIONS**

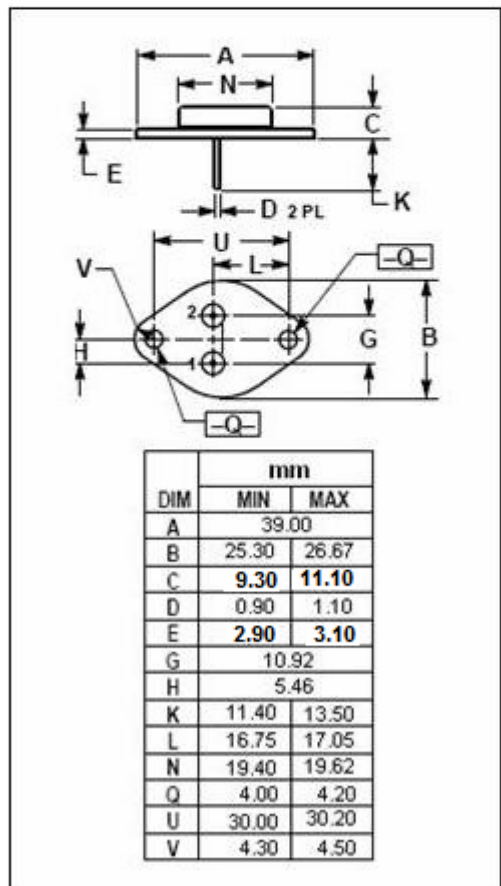
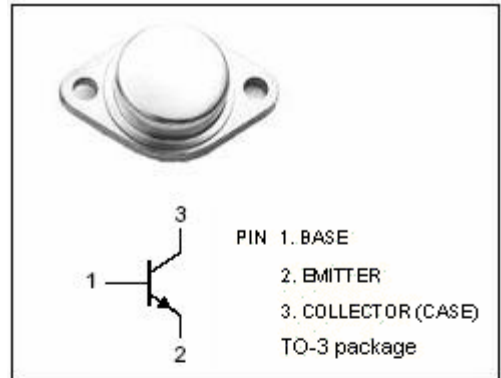
- Designed for high voltage CRT scanning applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	1200	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 @ $V_{CE} 100V, T_C 95^\circ C$	12.5	W
$T_J$	Junction Temperature	115	
$T_{stg}$	Storage Temperature	-65~115	

**THERMAL CHARACTERISTICS**

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



**Silicon NPN Power Transistor****BU108****ELECTRICAL CHARACTERISTICS** $T_C=25$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E= 100mA ; I_C= 0$	5		V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C= 4.5A ; I_B= 2A$		5.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C= 4.5A ; I_B= 2A$		1.3	V
$I_{CEX}$	Collector Cutoff Current	$V_{CE}= 1200V ; V_{BE}= -2V$		1.0	mA
$I_{CBO}$	Collector Cutoff Current	$V_{CB}= 1200V ; I_E= 0$		1.0	mA
$h_{FE}$	DC Current Gain	$I_C= 1A ; V_{CE}= 5V$	8		
$t_f$	Fall Time	$I_C= 4.5A$		1.2	$\mu s$