

INCHANGE Semiconductor

isc Product Specification

isc Silicon NPN Power Transistor

BU108

DESCRIPTION

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

APPLICATIONS

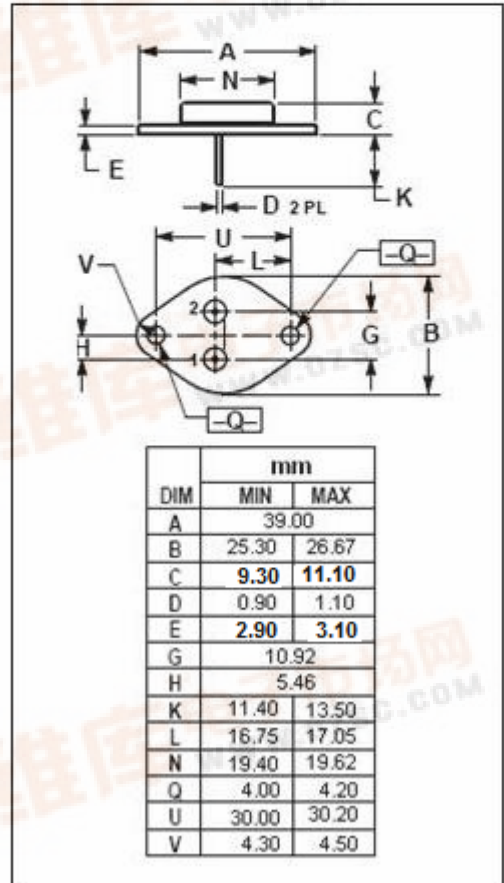
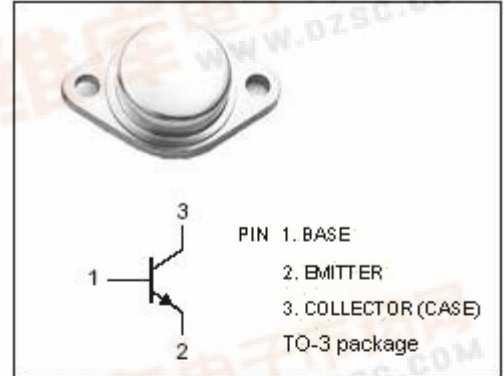
- Designed for high voltage CRT scanning applications.

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	$\mu\text{s}$