

isc Silicon NPN Power Transistor

BU204

DESCRIPTION

- High Voltage- $V_{CEX} = 1300V(\text{Min.})$
- Collector Current- $I_C = 2.5A$

APPLICATIONS

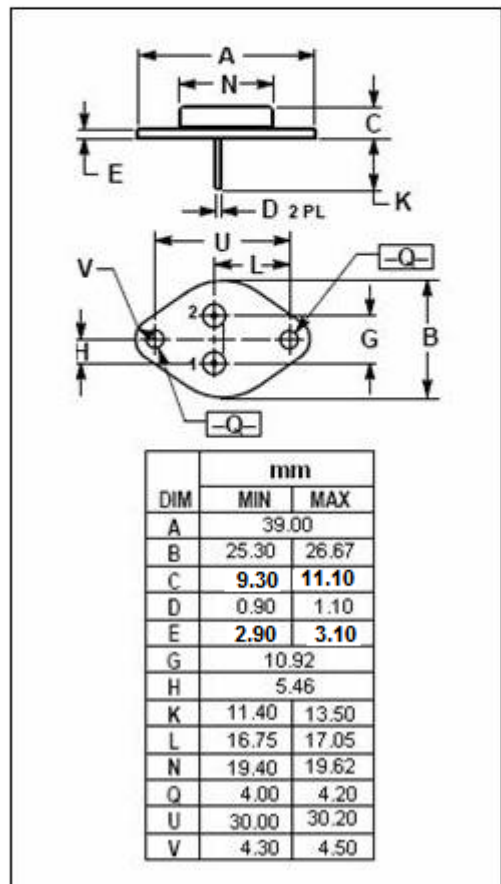
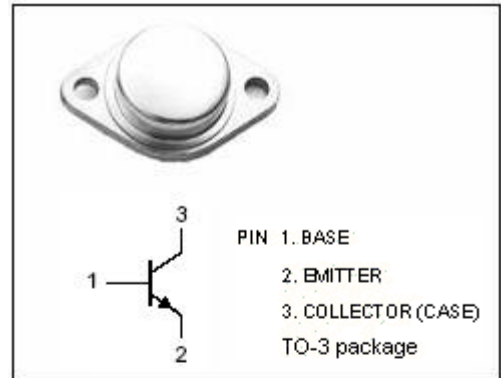
- Designed for use in large screen color deflection circuits .

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CEX}	Collector-Emitter Voltage	1300	V
V_{CEO}	Collector-Emitter Voltage	600	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	2.5	A
I_{CM}	Collector Current-Peak	3.0	A
I_B	Base Current-Continuous	1.0	A
P_C	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	36	W
T_J	Junction Temperature	115	$^\circ\text{C}$
T_{stg}	Storage Temperature	-65~115	$^\circ\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	2.5	$^\circ\text{C}/\text{W}$



isc Silicon NPN Power Transistor**BU204****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	$I_C=100\text{mA}$; $I_B=0$	600			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=2\text{A}$; $I_B=1\text{A}$			5.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=2\text{A}$; $I_B=1\text{A}$			1.5	V
I_{CES}	Collector Cutoff Current	$V_{CE}=1300\text{V}$; $V_{BE}=0$			1.0	mA
I_{EBO}	Emitter Cutoff Current	$V_{EB}=5.0\text{V}$; $I_C=0$			10	mA
h_{FE}	DC Current Gain	$I_C=2\text{A}$; $V_{CE}=5\text{V}$	2			
C_{OB}	Output Capacitance	$I_E=0$; $V_{CB}=10\text{V}$; $f_{test}=1\text{MHz}$		50		pF
f_T	Current-Gain—Bandwidth Product	$I_C=0.1\text{A}$; $V_{CE}=5\text{V}$; $f_{test}=1\text{MHz}$		4		MHz
t_f	Fall Time	$I_C=2\text{A}$; $I_B=1\text{A}$; $L_B=25\ \mu\text{H}$		0.65		μs