

isc Silicon NPN Power Transistor
BU205
DESCRIPTION

- High Voltage- $V_{CEX} = 1300V$ (Min.)
- Collector Current- $I_C = 2.5A$
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

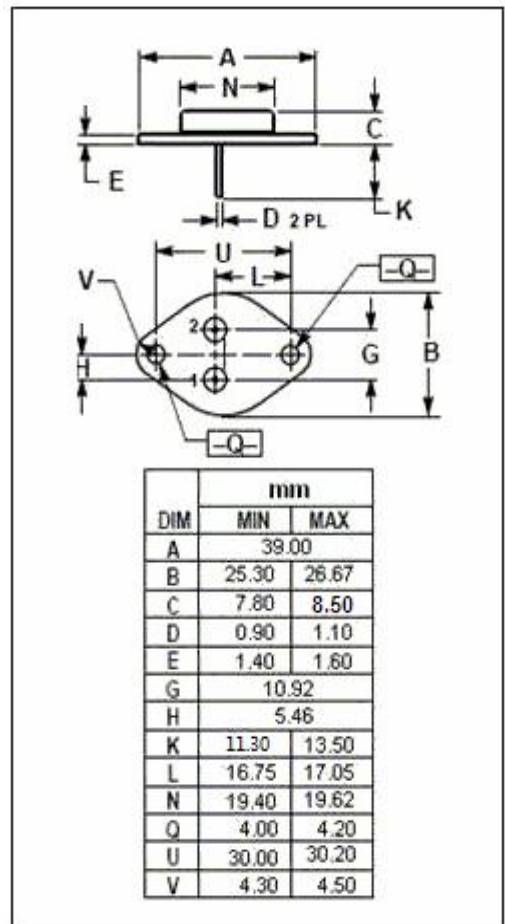
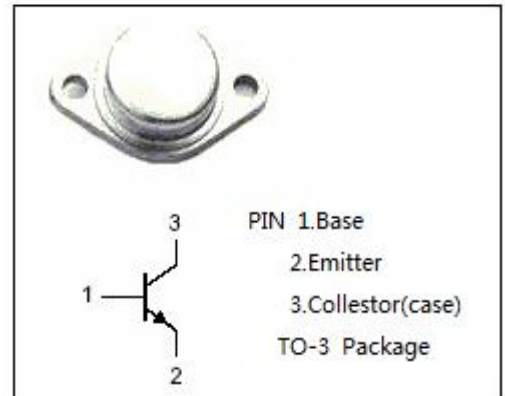
- Designed for use in large screen color deflection circuits .

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CEX}	Collector-Emitter Voltage	1300	V
V_{CEO}	Collector-Emitter Voltage	700	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 @ $T_c=25^\circ C$	36	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	2.5	$^\circ C/W$



isc Silicon NPN Power Transistor**BU205****ELECTRICAL CHARACTERISTICS**T_C=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEO(SUS)}	Collector-Emitter Sustaining Voltage	I _C = 50mA	700			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 2A; I _B = 1A			5.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 2A; I _B = 1A			1.5	V
I _{CES}	Collector Cutoff Current	V _{CE} = 1300V; V _{BE} = 0			1.0	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5.0V ; I _C = 0			10	mA
h _{FE}	DC Current Gain	I _C = 2A ; V _{CE} = 5V	2			
C _{OB}	Output Capacitance	I _E = 0; V _{CB} = 10V; f _{test} = 1MHz		50		pF
f _T	Current-Gain—Bandwidth Product	I _C = 0.1A; V _{CE} = 5V; f _{test} = 1MHz		4		MHz
t _f	Fall Time	I _C = 2A; I _B = 1A; L _B = 25 μ H		0.65		μ s

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