

isc Silicon NPN Power Transistor
BU104D
DESCRIPTION

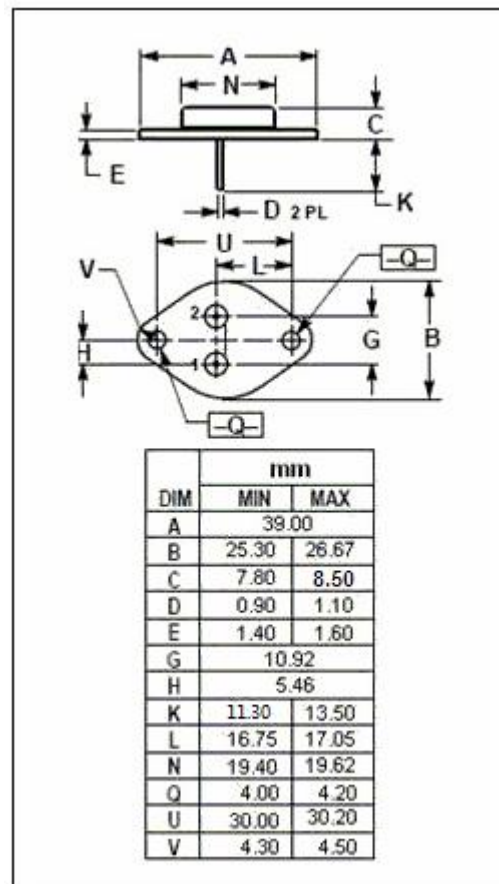
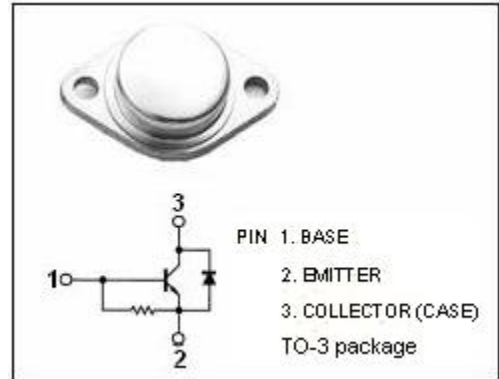
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 150V(\text{Min.})$
- Low Collector Saturation Voltage-
: $V_{CE(sat)} = 2.5V(\text{Max.}) @ I_C = 7A$
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for use in horizontal deflection output stages of TV's and CRT's.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	400	V
V_{CEX}	Collector-Emitter Voltage $V_{BE} = -5V$	400	V
V_{CEO}	Collector-Emitter Voltage	150	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current-Continuous	7	A
I_{CM}	Collector Current-Peak Repetitive	15	A
I_B	Base Current-Continuous	3	A
P_C	Collector Power Dissipation @ $T_C = 25^\circ\text{C}$	85	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-65~150	$^\circ\text{C}$



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ELECTRICAL CHARACTERISTICS

 T_C=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = 50mA; I _B = 0	150			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 7A; I _B = 1A			2.5	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 7A; I _B = 1A			2.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 250V; I _E = 0			0.5	mA
I _{CEX}	Collector Cutoff Current	V _{CE} = 400V; V _{BE} = -5V			1.0	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 6V; I _C = 0			400	mA
h _{FE}	DC Current Gain	I _C = 5A; V _{CE} = 1.75V	7		50	
f _T	Current-Gain—Bandwidth Product	I _C = 0.5A; V _{CE} = 10V		10		MHz

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