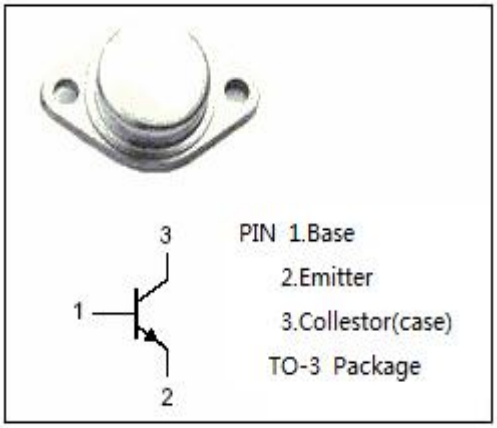
isc Silicon NPN Power Transistor — BU104

DESCRIPTION

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

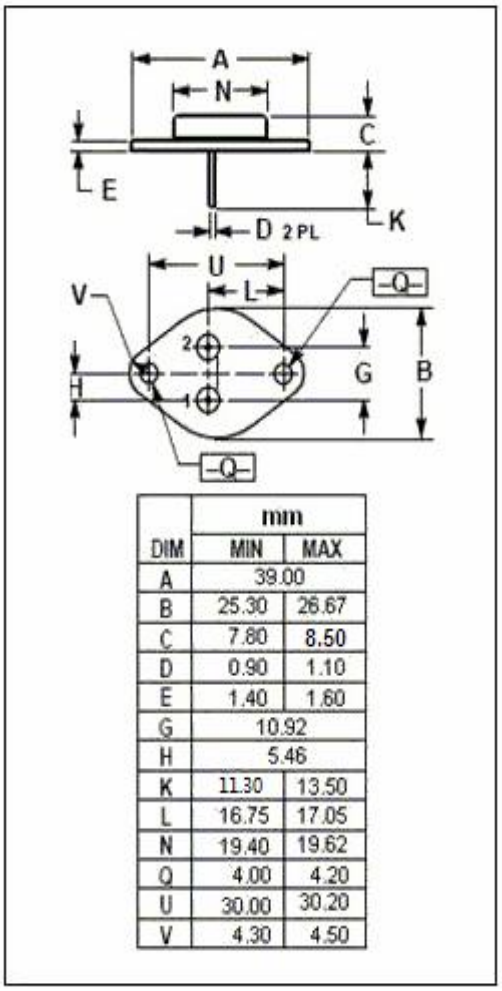


APPLICATIONS

- Designed for use in horizontal deflexion output stage of B/W TV receivers.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	400	V
V_{CEO}	Collector-Emitter Voltage	150	V
V_{CEX}	Collector-Emitter Voltage V_{BE}= -5V	400	V
V_{EBO}	Emitter-Base Voltage	10	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℃	85	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-65~150	℃



DIM	mm MIN	MAX
A	39.00	
B	25.30	26.67
C	7.80	8.50
D	0.90	1.10
E	1.40	1.60
G	10.92	
H	5.46	
K	11.30	13.50
L	16.75	17.05
N	19.40	19.62
Q	4.00	4.20
U	30.00	30.20
V	4.30	4.50

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance, Junction to Case	2.0	℃/W

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ELECTRICAL CHARACTERISTICS

T_C=25℃ 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}= 10V; I_C= 0			10	mA
h_{FE}	DC Current Gain	I_C= 5A; V_{CE}= 1.75V	10		50	
f_T	Current-Gain—Bandwidth Product	I_C= 0.5A; V_{CE}= 10V		10		MHz