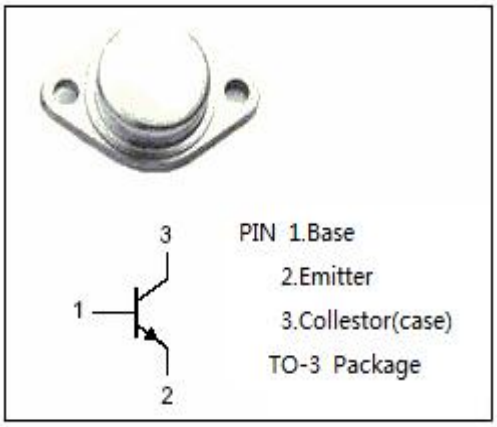
isc Silicon NPN Power Transistors — BU120

DESCRIPTION

- Collector-Emitter Sustaining Voltage-
  :$V_{CEO(SUS)}$ = 200V(Min)
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

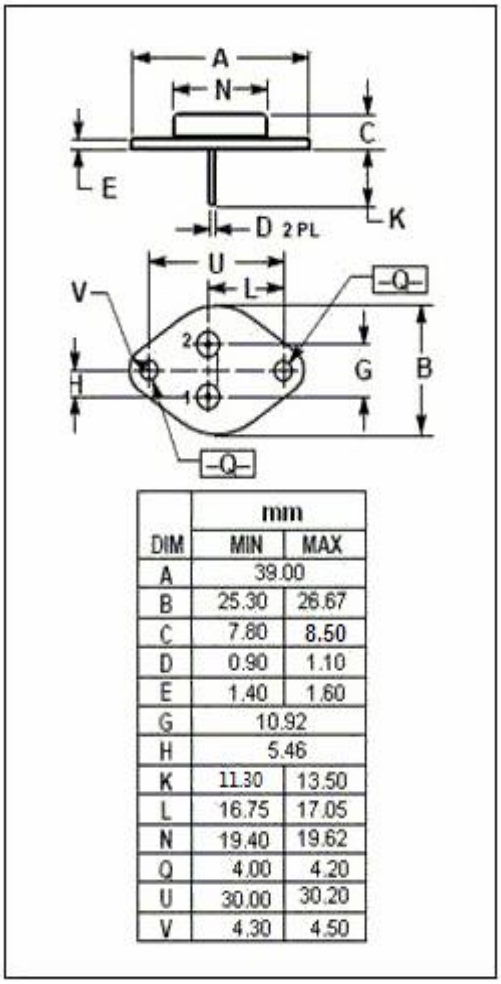


APPLICATIONS

- Designed for horizontal deflection output stage of CTV receivers and high voltalge, fast switching and industrial application.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Emitter Voltage	400	V
V_{CEO}	Collector-Emitter Voltage	200	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	5	A
I_{CM}	Collector Current-peak	15	A
I_B	Base Current-Continuous	3.0	A
P_C	Collector Power Dissipation @T_C=25℃	50	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	1.75	℃/W

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	I_C= 50mA ; I_B= 0	200		V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	I_C= 1mA; I_E= 0	400		V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 8A ;I_B= 2.5A		3.3	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 8A ;I_B= 2.5A		2.2	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 400V; I_E= 0		0.1	mA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 7V; I_C= 0		0.1	mA
h_{FE}	DC Current Gain	I_C= 1A; V_{CE}= 5V	35	165	
f_T	Current-Gain—Bandwidth Product	I_C= 1A; V_{CE}= 10V;f_{test}= 1MHz	6		MHz