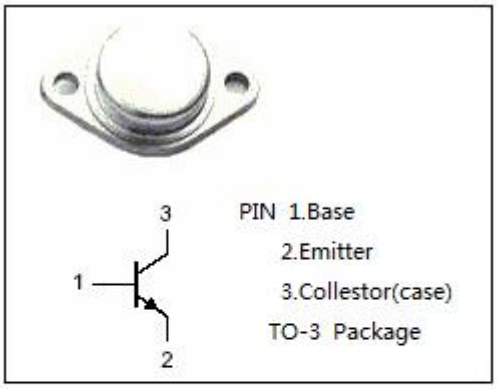
isc Silicon NPN Power Transistor — BU123

DESCRIPTION

- Excellent Safe Operating Area
- Collector-Emitter Saturation Voltage-
  : $V_{CE(sat)}$= 1.0 V(Max)@ I_C = 5A
- Collector-Emitter Sustaining Voltage-
  : $V_{CEO(SUS)}$= 120 V(Min)
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

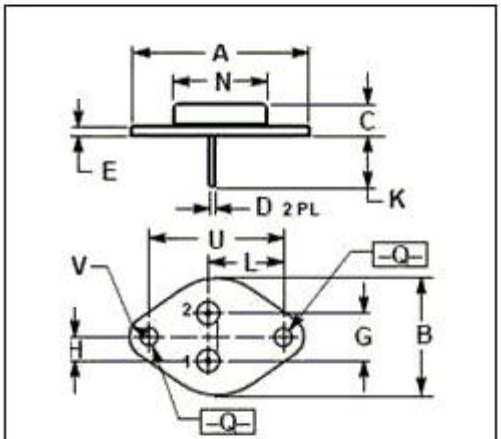


APPLICATIONS

- Designed for horizontal deflection output stage of TVs and CRTs applications

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	180	V
V_{CEO}	Collector-Emitter Voltage	120	V
V_{EBO}	Emitter-Base Voltage	8	V
I_C	Collector Current-Continuous	5	A
I_{CM}	Collector Current-Peak	8	A
I_B	Base Current	2	A
P_C	Collector Power Dissipation@T_C=25℃	67	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-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

isc Silicon NPN Power Transistor BU123

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	120		V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 5A; I_B= 0.5A		1.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 5A; I_B= 0.5A		1.2	V
I_{CBO}	Collector Base Cutoff Current	V_{CB}=180V; I_E= 0		1.0	mA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 7V; I_C= 0		1.0	mA
h_{FE-1}	DC Current Gain	I_C= 1A ; V_{CE}= 5V	25	250	
h_{FE-2}	DC Current Gain	I_C= 5A ; V_{CE}= 5V	5		
f_T	Current Gain-Bandwidth Product	I_C= 0.5A ; V_{CE}= 10V	10		MHz