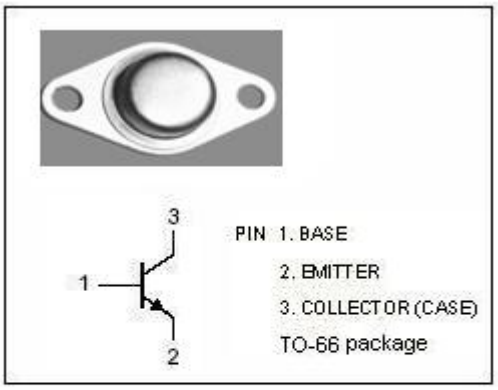
isc Silicon NPN Power Transistor — BU103A

DESCRIPTION

- Continuous Collector Current-I_C= 1A
- Collector Power Dissipation-
  : P_C= 30W @T_C= 25℃
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



APPLICATIONS

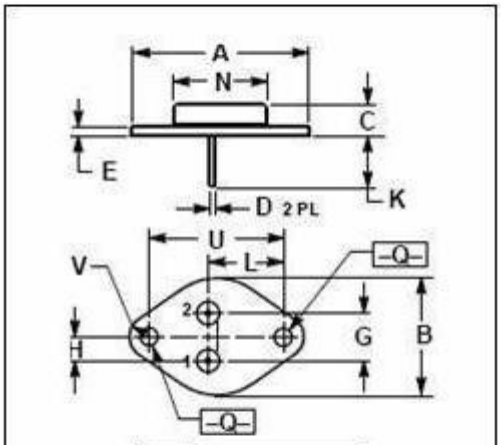
- Designed for TV vertical applications.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	120	V
V_{CER}	Collector-Emitter Voltage R_{BE}= 220 Ω	120	V
V_{EBO}	Emitter-Base Voltage	8	V
I_C	Collector Current-Continuous	1	A
P_C	Collector Power Dissipation@T_C=25℃	30	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-65~150	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	6.0	℃/W



DIM	mm MIN	MAX
A	31.40	31.80
B	17.30	17.70
C	6.70	7.10
D	0.70	0.90
E	1.40	1.60
G	5.08	
H	2.54	
K	9.80	10.20
L	14.70	14.90
N	12.40	12.60
Q	3.60	3.80
U	24.30	24.50
V	3.50	3.70

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Sustaining Voltage	I_C= 50mA; Ib=0	120			V
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	I_C= 0.2A; I_B= 20mA			1.0	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 80V; I_E= 0			0.1	mA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 5V; I_C= 0			0.1	mA
h_{FE}	DC Current Gain	I_C= 0.2A; V_{CE}= 10V	50		200	
C_{OB}	Collector Output Capacitance	I_E= 0; V_{CB}= 10V; f= 1MHz		50		pF
f_T	Current Gain-Bandwidth Product	I_C= 0.1A; V_{CE}= 10V		100		MHz