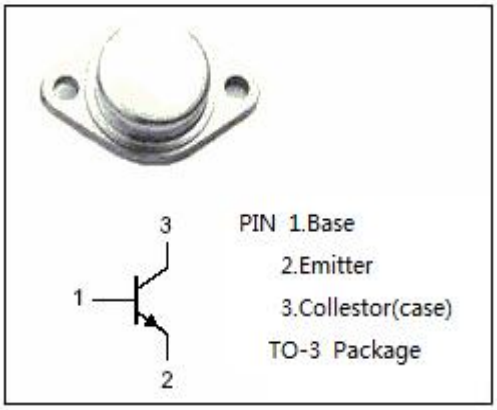
isc Silicon NPN Power Transistor — BU105

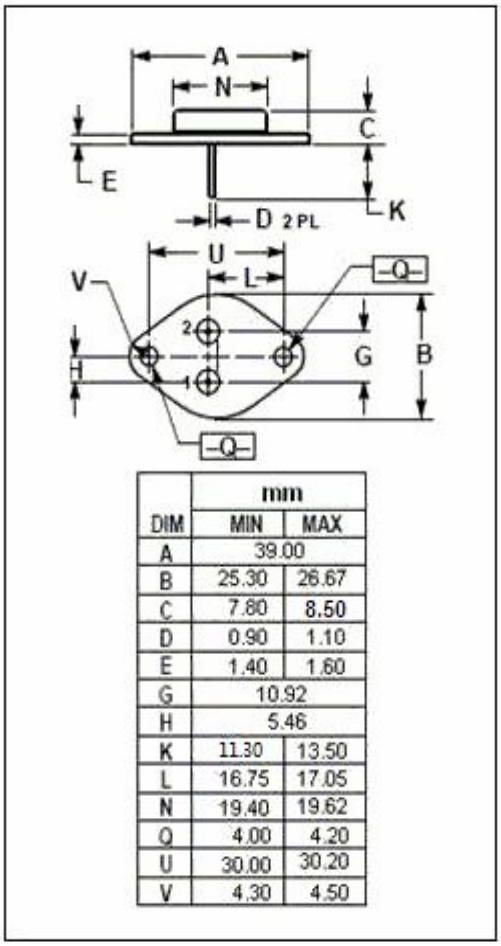
DESCRIPTION

- High Voltage-V_{CER}= 1300V(Min.)
- Collector-Emitter Saturation Voltage-
  : $V_{CE(sat)}$= 5.0V(Max.)@ I_C= 2.5A
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



APPLICATIONS

- Designed for use in line operated B&W(19 and 20 inch 110℃ deflection circuits) or color (11 and 14 inch 90℃ deflection circuits TV receivers.



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

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	1300	V
V_{CER}	Collector-Emitter Voltage R_{BE}= 100Ω	1300	V
V_{CEO}	Collector-Emitter Voltage	750	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	2.5	A
P_C	Collector Power Dissipation @T_C= 90℃	10	W
T_J	Junction Temperature	115	℃
T_{stg}	Storage Temperature	-65~115	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	2.5	℃/W

isc Silicon NPN Power Transistor BU105

ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	I_C= 50mA; I_B= 0	750			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	I_E= 1mA; I_C= 0	5			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 2.5A; I_B= 1.5A			5.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 2.5A; I_B= 1.5A			1.5	V
I_{CES}	Collector Cutoff Current	V_{CE}= 1300V; V_{BE}= 0			1.0	mA
h_{FE-1}	DC Current Gain	I_C= 2A ; V_{CE}= 5V	2			
C_{OB}	Output Capacitance	I_E= 0; V_{CB}= 10V; f_{test}= 0.1MHz		65		pF
f_T	Current-Gain—Bandwidth Product	I_C= 0.1A; V_{CE}= 5V		7.5		MHz
t_f	Fall Time	I_C= 2A; I_{B1}= 1.5A; L_B= 12 μ H		0.5		μ s