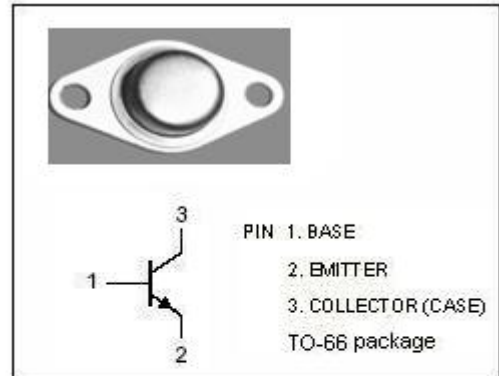


**isc Silicon NPN Power Transistor**
**BU103A**
**DESCRIPTION**

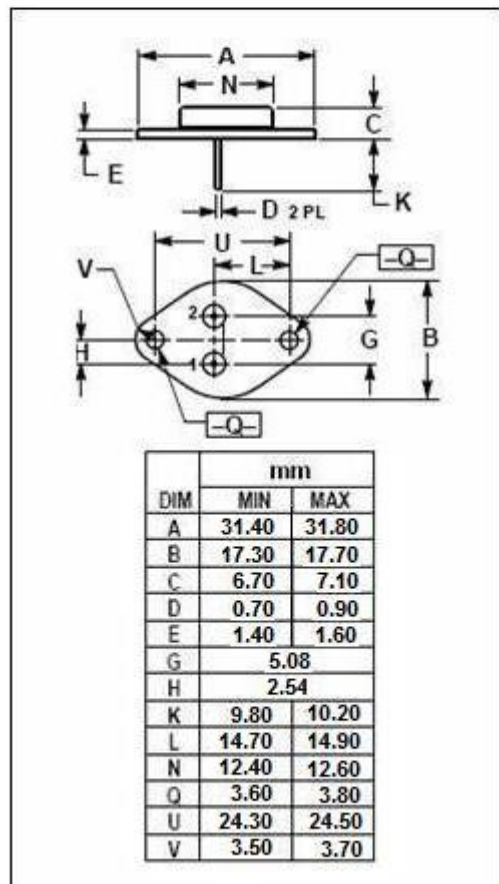
- Continuous Collector Current- $I_C = 1A$
- Collector Power Dissipation-  
:  $P_C = 30W @ T_C = 25^\circ C$
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Designed for TV vertical applications.


**ABSOLUTE MAXIMUM RATINGS( $T_a = 25^\circ C$ )**

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


**THERMAL CHARACTERISTICS**

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

**isc Silicon NPN Power Transistor****BU103A****ELECTRICAL CHARACTERISTICS** $T_C=25^\circ\text{C}$  unless otherwise specified

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

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