

isc Silicon NPN Power Transistor

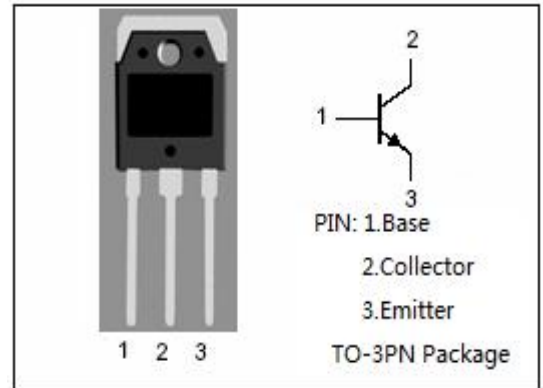
BU903

DESCRIPTION

- Collector-Emitter Sustaining Voltage-
: $V_{CEO(SUS)} = 550V(\text{Min})$
- High Switching Speed
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for use in power supplies and deflection circuits for color receivers and monitors.

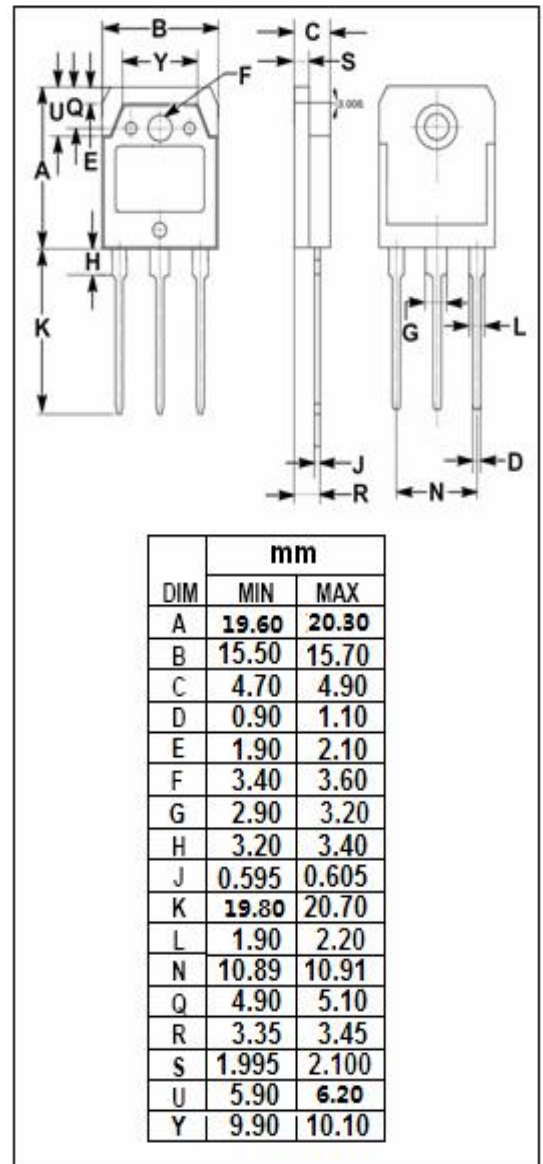


ABSOLUTE MAXIMUM RATINGS($T_a=25^{\circ}\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CES}	Collector- Emitter Voltage $V_{BE}=0$	1350	V
V_{CEO}	Collector-Emitter Voltage	550	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current-Continuous	6	A
I_{CM}	Collector Current-Peak	8	A
I_B	Base Current-Continuous	2	A
I_{BM}	Base Current-Peak	4	A
I_E	Emitter Current-Continuous	8	A
I_{EM}	Emitter Current-Peak	12	A
P_C	Collector Power Dissipation @ $T_C=25^{\circ}\text{C}$	125	W
T_J	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-65~150	$^{\circ}\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	1.0	$^{\circ}\text{C/W}$



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ELECTRICAL CHARACTERISTICS

T_C=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CE0(SUS)}	Collector-Emitter Sustaining Voltage	I _C = 0.1A ; I _B = 0	550			V
V _{CE(sat)-1}	Collector-Emitter Saturation Voltage	I _C = 3.2A; I _B = 0.53A			2	V
V _{CE(sat)-2}	Collector-Emitter Saturation Voltage	I _C = 6A; I _B = 2A			1.8	V
I _{CES}	Collector Cutoff Current	V _{CE} = V _{CESmax} ; V _{BE} = 0 V _{CE} = V _{CESmax} ; V _{BE} = 0; T _J = 125°C			1 2	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 6V; I _C =0			1	mA
h _{FE-1}	DC Current Gain	I _C = 10mA; V _{CE} = 5V	6			
h _{FE-2}	DC Current Gain	I _C = 1.5A; V _{CE} = 5V	8			
h _{FE-3}	DC Current Gain	I _C = 3.2A; V _{CE} = 2V	6			
h _{FE-4}	DC Current Gain	I _C = 4A; V _{CE} = 3V	5.5			

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