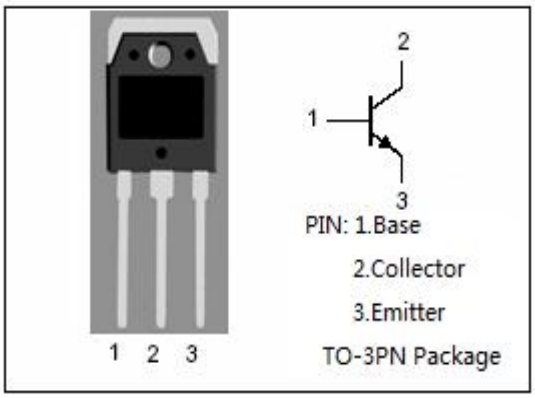
isc Silicon NPN Power Transistor — BU903

DESCRIPTION

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



APPLICATIONS

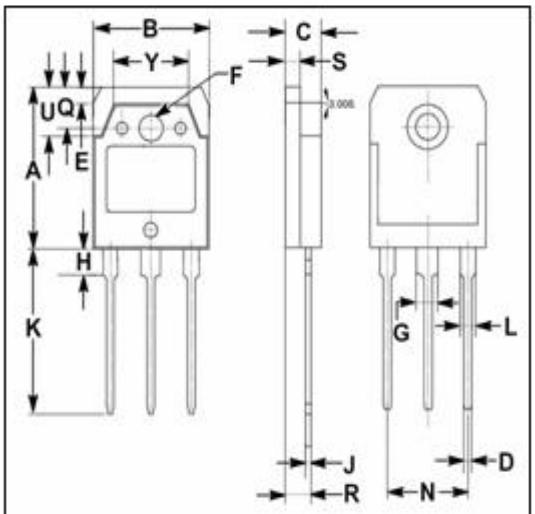
- Designed for use in power supplies and deflection circuits for color receivers and monitors.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

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℃	125	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-65~150	℃

THERMAL CHARACTERISTICS

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



DIM	mm MIN	mm MAX
A	**19.60**	**20.30**
B	15.50	15.70
C	4.70	4.90
D	0.90	1.10
E	1.90	2.10
F	3.40	3.60
G	2.90	3.20
H	3.20	3.40
J	0.595	0.605
K	**19.80**	20.70
L	1.90	2.20
N	10.89	10.91
Q	4.90	5.10
R	3.35	3.45
S	1.995	2.100
U	5.90	**6.20**
Y	9.90	10.10

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	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℃			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			