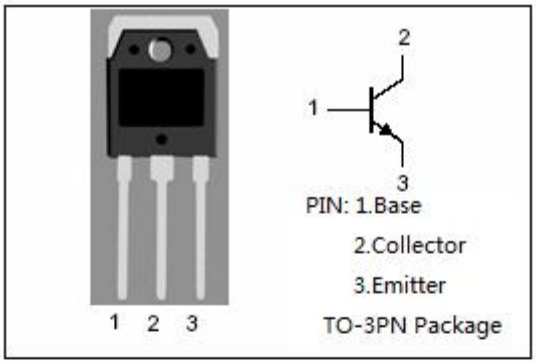
isc Silicon NPN Power Transistor — BU2527A

DESCRIPTION

- Collector-Emitter Sustaining Voltage-
  : $V_{CEO(SUS)}$= 800V (Min)
- High Switching Speed
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

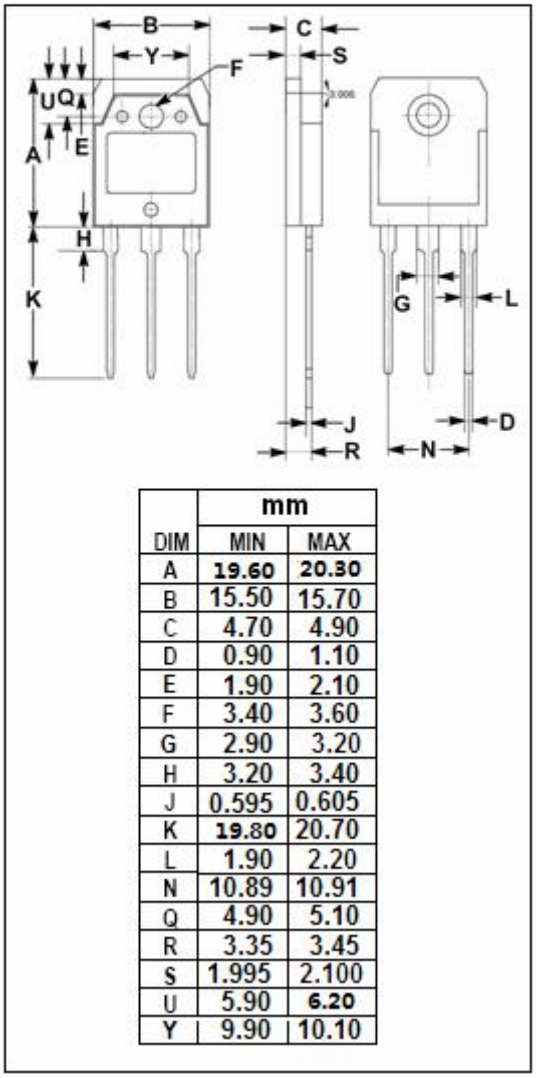
APPLICATIONS

- Designed for use in horizontal deflection circuits of large screen colour television receivers up to 64 KHz.



ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CESM}	Collector- Emitter Voltage Peak value	1500	V
V_{CEO}	Collector-Emitter Voltage	800	V
V_{EBO}	Emitter-Base Voltage	7.5	V
I_C	Collector Current- Continuous	12	A
I_{CM}	Collector Current-Peak	30	A
I_B	Base Current- Continuous	8	A
I_{BM}	Base 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	℃



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

THERMAL CHARACTERISTICS

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

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	I_E= 1mA; I_C= 0	7.5			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 6A; I_B= 1.2A			5.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 6A; I_B= 1.2A			1.3	V
I_{CES}	Collector Cutoff Current	V_{CE}= 1500V; V_{BE}= 0 V_{CE}= 1500V; V_{BE}= 0; T_C=125℃			0.25 2.0	mA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 7.5V; I_C= 0			0.25	mA
h_{FE-1}	DC Current Gain	I_C= 1A; V_{CE}= 5V	6		21	
h_{FE-2}	DC Current Gain	I_C= 6A; V_{CE}= 5V	5		9	
C_{OB}	Output Capacitance	I_E= 0; V_{CB}= 10V; f_{test}= 1MHz		145		pF