

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

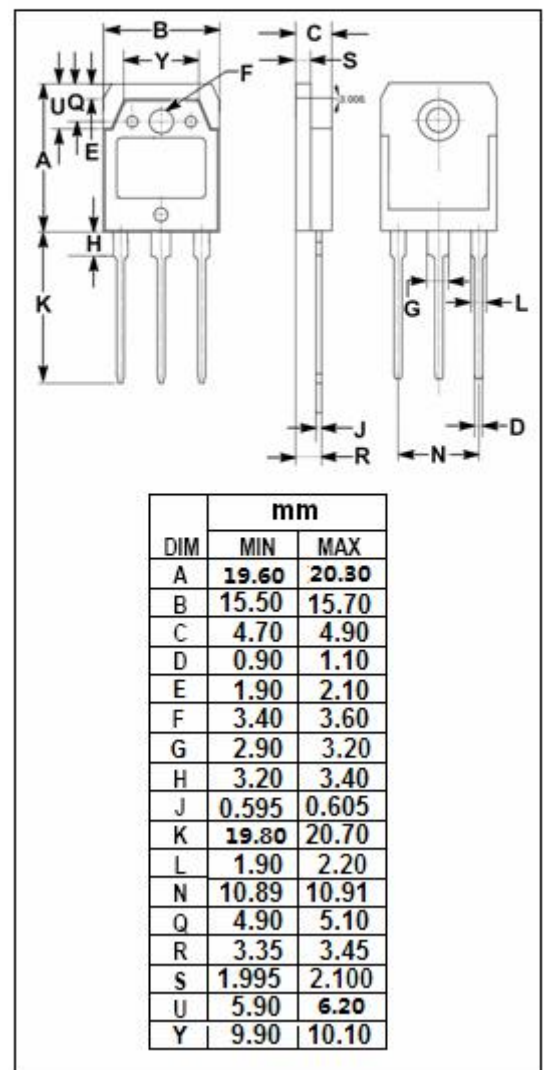
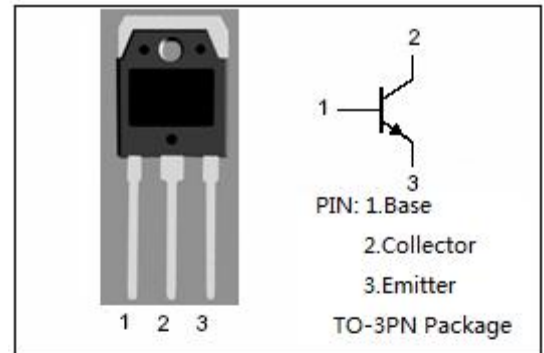
- Designed for use in horizontal deflection circuits of large screen colour television receivers up to 64 KHz.

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

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 @ $T_c=25^\circ C$	125	W
T_J	Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature Range	-65~150	$^\circ C$

THERMAL CHARACTERISTICS

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



ELECTRICAL CHARACTERISTICS

 T_C=25°C 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°C			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

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