

isc Silicon NPN Power Transistor

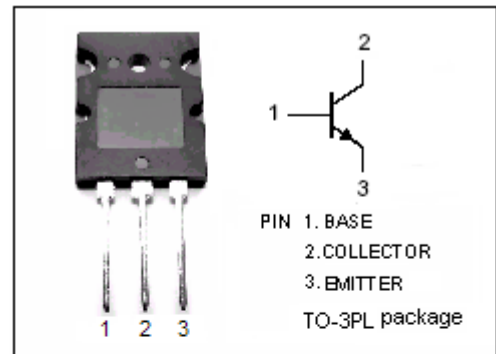
BU4530AL

DESCRIPTION

- Collector-Emitter Sustaining Voltage-
: $V_{CEO(SUS)} = 800V(\text{Min})$
- High Switching Speed

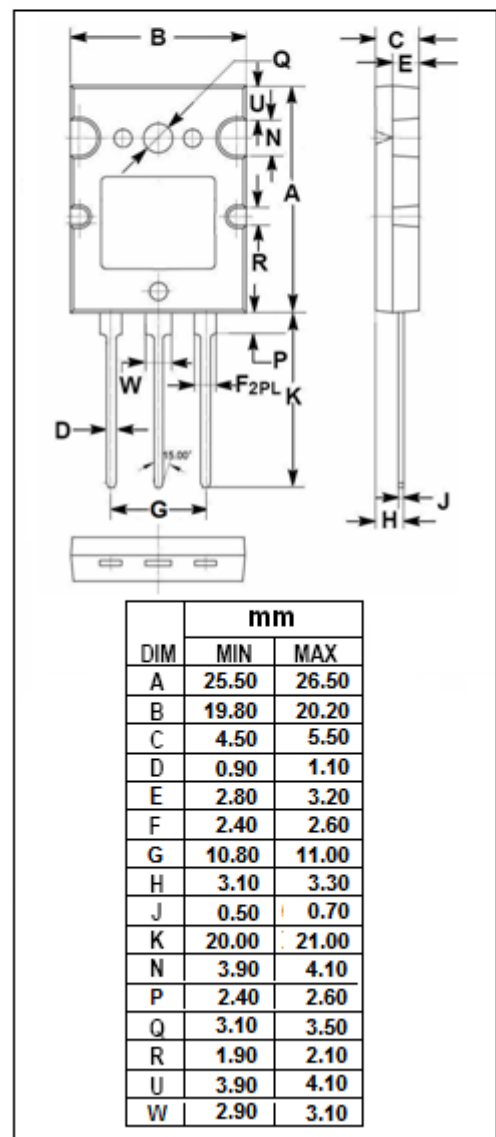
APPLICATIONS

- Designed for use in horizontal deflection circuits of color TV receivers and PC monitors.



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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CES}	Collector-Emitter Voltage	1500	V
V_{CEO}	Collector-Emitter Voltage	800	V
V_{EBO}	Emitter-Base Voltage	7.5	V
I_C	Collector Current-Continuous	16	A
I_{CM}	Collector Current-Peak	40	A
I_B	Base Current-Continuous	10	A
I_{BM}	Base Current-Peak	15	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	-55~150	$^\circ\text{C}$



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_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEO(SUS)}	Collector-Emitter Sustaining Voltage	I _C = 100mA; I _B = 0; L= 25mH	800			V
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 = 10A ; I _B = 2.22A			3.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 10A ; I _B = 2.22A			1.01	V
I _{CES}	Collector Cutoff Current	V _{CEV} =1500V, V _{BE(off)} =0 V _{CEV} =1500V, V _{BE(off)} =0; T _C =125°C			1.0 2.0	mA
h _{FE-1}	DC Current Gain	I _C = 1A ; V _{CE} = 5V		12		
h _{FE-2}	DC Current Gain	I _C = 10A ; V _{CE} = 5V	4.8		8.5	

Switching times; Resistive load

t _s	Storage Time	I _C = 9A; I _{B1} = 1.8A; I _{B2} = -4.5A			4.0	μ s
t _f	Fall Time				0.26	μ s