

isc Silicon NPN Power Transistor

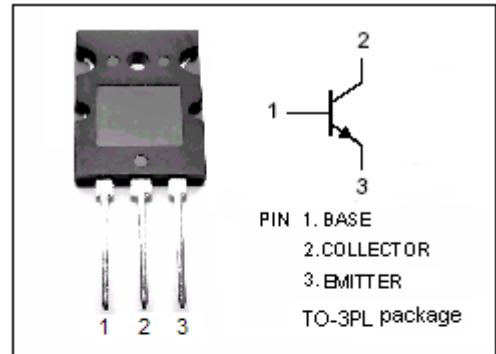
BU4530AL

DESCRIPTION

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

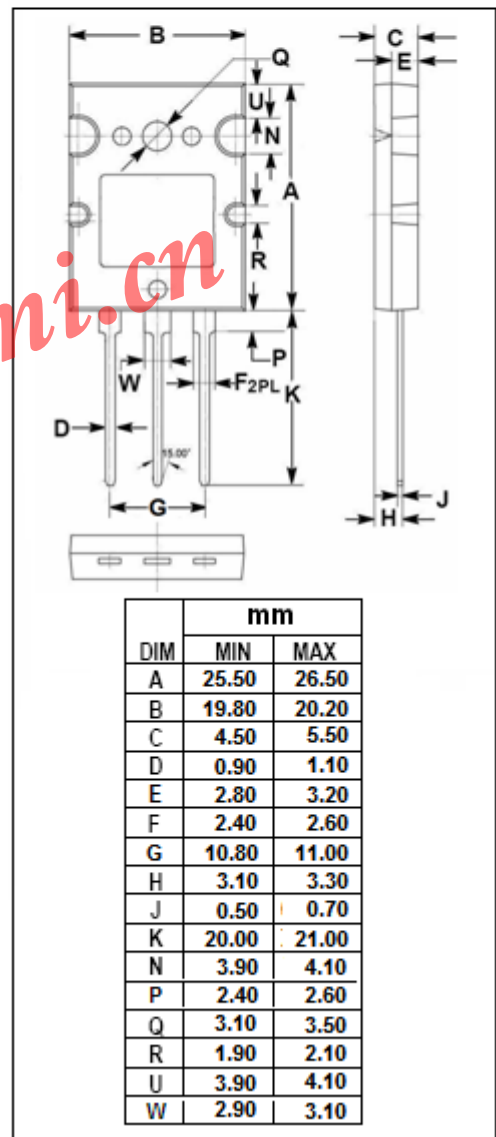
APPLICATIONS

- 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<sub>j</sub>=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>CEO(SUS)</sub>	Collector-Emitter Sustaining Voltage	I <sub>C</sub> = 100mA; I <sub>B</sub> = 0; L= 25mH	800			V
V <sub>(BR)EBO</sub>	Emitter-Base Breakdown Voltage	I <sub>E</sub> = 1mA; I <sub>C</sub> = 0	7.5			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 10A ; I <sub>B</sub> = 2.22A			3.0	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> = 10A ; I <sub>B</sub> = 2.22A			1.01	V
I <sub>CES</sub>	Collector Cutoff Current	V <sub>CEV</sub> =1500V, V <sub>BE(off)</sub> =0 V <sub>CEV</sub> =1500V, V <sub>BE(off)</sub> =0; T <sub>C</sub> =125°C			1.0 2.0	mA
h <sub>FE-1</sub>	DC Current Gain	I <sub>C</sub> = 1A ; V <sub>CE</sub> = 5V		12		
h <sub>FE-2</sub>	DC Current Gain	I <sub>C</sub> = 10A ; V <sub>CE</sub> = 5V	4.8		8.5	

Switching times; Resistive load

t <sub>s</sub>	Storage Time	I <sub>C</sub> = 9A; I <sub>B1</sub> = 1.8A; I <sub>B2</sub> = -4.5A			4.0	μ s
t <sub>f</sub>	Fall Time				0.26	μ s