

Silicon NPN Power Transistor

BU2523AF

DESCRIPTION

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

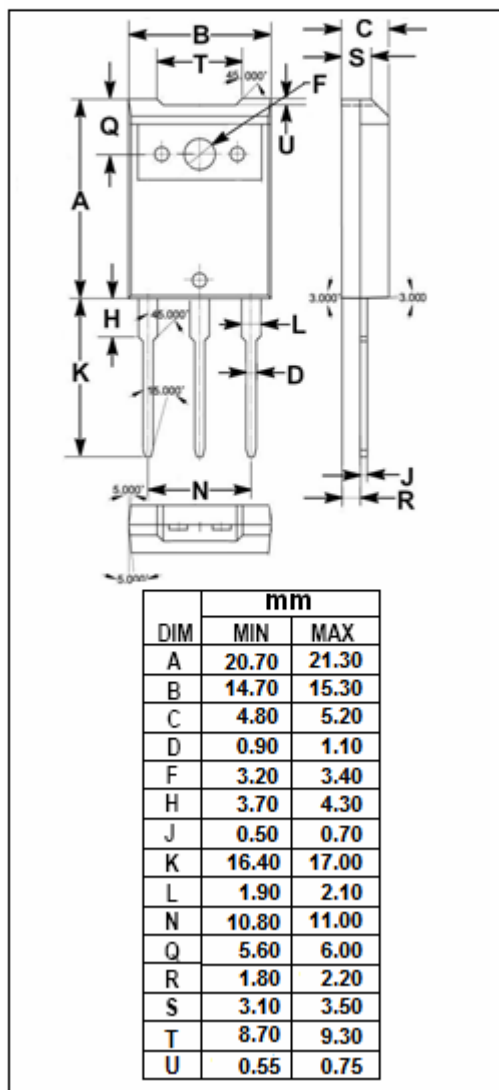
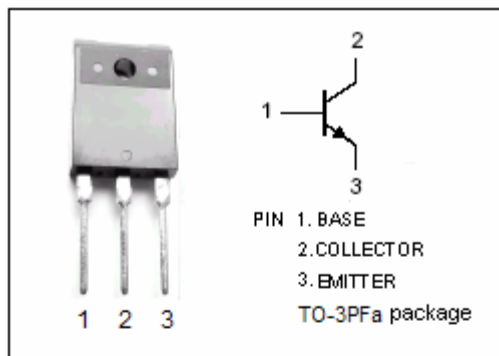
APPLICATIONS

- Designed for use in horizontal deflection circuits of HDTV receivers and pc monitors.

ABSOLUTE MAXIMUM RATINGS( $T_a=25$  )

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CES}$	Collector- Emitter Voltage( $V_{BE} = 0$ )	1200	V
$V_{CEO}$	Collector-Emitter Voltage	800	V
$V_{EBO}$	Emitter-Base Voltage	7.5	V
$I_C$	Collector Current- Continuous	11	A
$I_{CM}$	Collector Current-Peak	29	A
$I_B$	Base Current- Continuous	7	A
$I_{BM}$	Base Current-Peak	10	A
$P_C$	Collector Power Dissipation @ $T_C=25$	45	W
$T_J$	Junction Temperature	150	
$T_{stg}$	Storage Temperature Range	-55~150	

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	2.8	/W



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## ELECTRICAL CHARACTERISTICS

T<sub>C</sub>=25 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> = 5.5A; I <sub>B</sub> = 1.1A			5.0	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> = 5.5A; I <sub>B</sub> = 1.1A			1.0	V
I <sub>CES</sub>	Collector Cutoff Current	V <sub>CE</sub> = 1200V ; V <sub>BE</sub> = 0 V <sub>CE</sub> = 1200V ; V <sub>BE</sub> = 0; T <sub>C</sub> =125			1.0 2.0	mA
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = 7.5V ; I <sub>C</sub> = 0			1.0	mA
h <sub>FE-1</sub>	DC Current Gain	I <sub>C</sub> = 1A ; V <sub>CE</sub> = 5V		14		
h <sub>FE-2</sub>	DC Current Gain	I <sub>C</sub> = 5.5A ; V <sub>CE</sub> = 5V	5		10.3	