

isc Silicon NPN Power Transistor

BU4508DX

DESCRIPTION

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

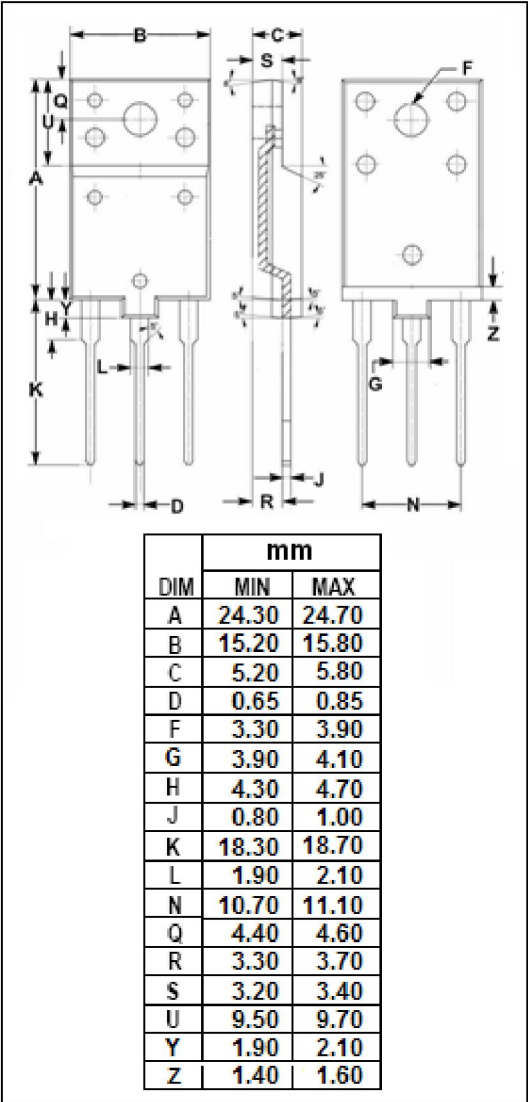
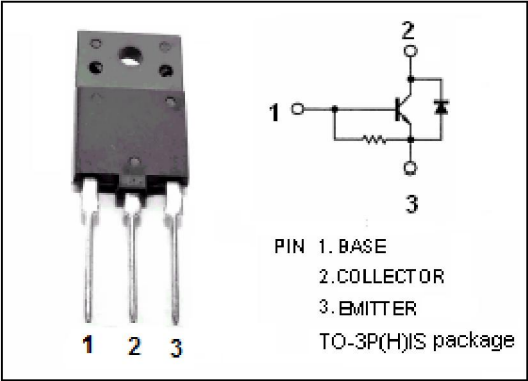
APPLICATIONS

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

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CES}$	Collector- Emitter Voltage( $V_{BE} = 0$ )	1500	V
$V_{CEO}$	Collector-Emitter Voltage	800	V
$V_{EBO}$	Emitter-Base Voltage	8	V
$I_C$	Collector Current- Continuous	8	A
$I_{CM}$	Collector Current-Peak	15	A
$I_B$	Base Current- Continuous	4	A
$I_{BM}$	Base Current-Peak	6	A
$P_C$	Collector Power Dissipation @ $T_C=25^{\circ}C$	45	W
$T_J$	Junction Temperature	150	$^{\circ}C$
$T_{stg}$	Storage Temperature Range	-65~150	$^{\circ}C$

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



**isc Silicon NPN Power Transistor****BU4508DX****ELECTRICAL CHARACTERISTICS****T<sub>C</sub>=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>CEQ(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> = 300mA; I <sub>C</sub> = 0	8			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 5A; I <sub>B</sub> = 1.25A			3.0	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> = 5A; I <sub>B</sub> = 1.25A			1.03	V
I <sub>CES</sub>	Collector Cutoff Current	V <sub>CE</sub> = 1500V; V <sub>BE</sub> = 0 V <sub>CE</sub> = 1500V; V <sub>BE</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> = 0.5A; V <sub>CE</sub> = 5V	7			
h <sub>FE-2</sub>	DC Current Gain	I <sub>C</sub> = 5A; V <sub>CE</sub> = 5V	4.2			
V <sub>ECF</sub>	C-E Diode Forward Voltage	I <sub>F</sub> = 5A			2.2	V

**Switching times**

t <sub>stg</sub>	Storage Time	I <sub>C</sub> = 5A, I <sub>B1</sub> = 1.0A; I <sub>B2</sub> = -2.5A			3.75	μ s
t <sub>f</sub>	Fall Time				0.4	μ s