

isc Silicon NPN Power Transistor

BU2725AX

DESCRIPTION

- Collector-Emitter Sustaining Voltage-
: $V_{CEO(SUS)} = 825V$ (Min)
- High Switching Speed

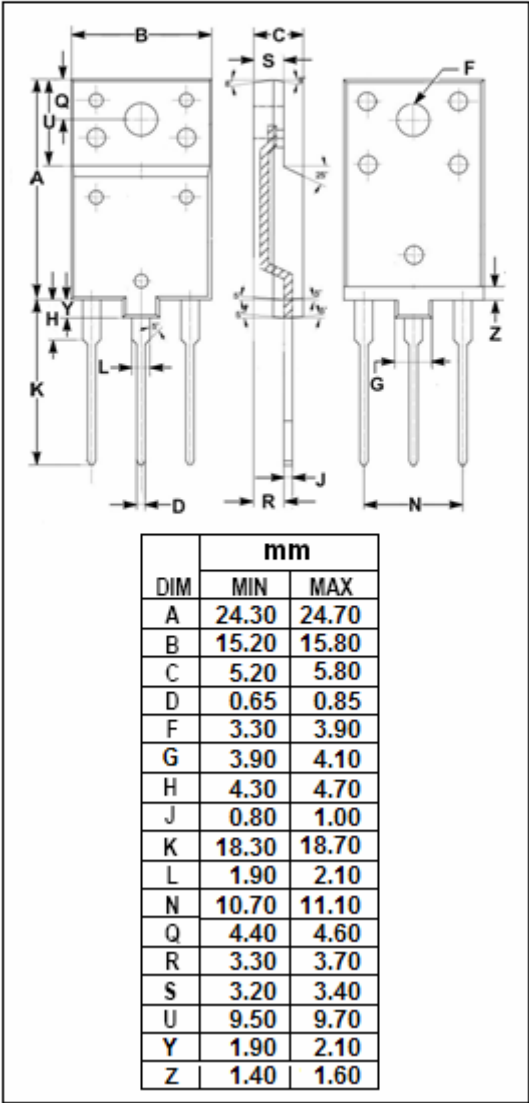
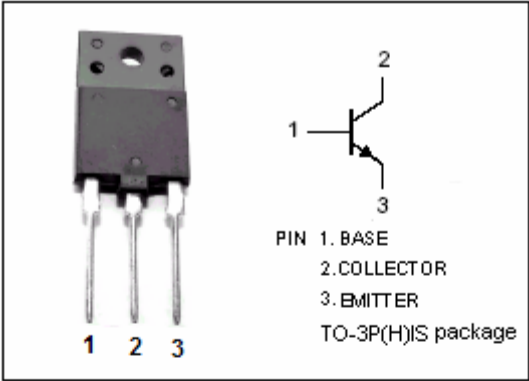
APPLICATIONS

- 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($V_{BE}= 0$)	1700	V
V_{CEO}	Collector-Emitter Voltage	825	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	12	A
I_{BM}	Base Current-Peak	20	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**BU2725AX****ELECTRICAL CHARACTERISTICS****T_C=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	825			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 = 7A; I _B = 1.75A			1.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 7A; I _B = 1.75A			1.1	V
I _{CES}	Collector Cutoff Current	V _{CE} = 1500V; V _{BE} = 0 V _{CE} = 1500V; V _{BE} = 0; T _C =125°C			1.0 2.0	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 7.5V; I _C = 0			1.0	mA
h _{FE-1}	DC Current Gain	I _C = 0.1A; V _{CE} = 5V		22		
h _{FE-2}	DC Current Gain	I _C = 7A; V _{CE} = 1V	4		8.5	

Switching times

t _{stg}	Storage Time	I _{Csat} = 7A, L _C = 650 μ H; C _{fb} = 18 nF; V _{CC} = 162 V; I _{B(end)} = 1.5A; L _B = 2 μ H; -V _{BB} = 4V			6.5	μ s
t _f	Fall Time				0.8	μ s