

isc Silicon NPN Power Transistor

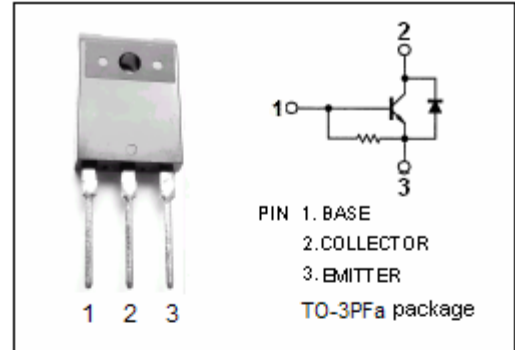
BU2725DF

DESCRIPTION

- High Switching Speed
- High Voltage
- Built-in Ddamper Ddiode

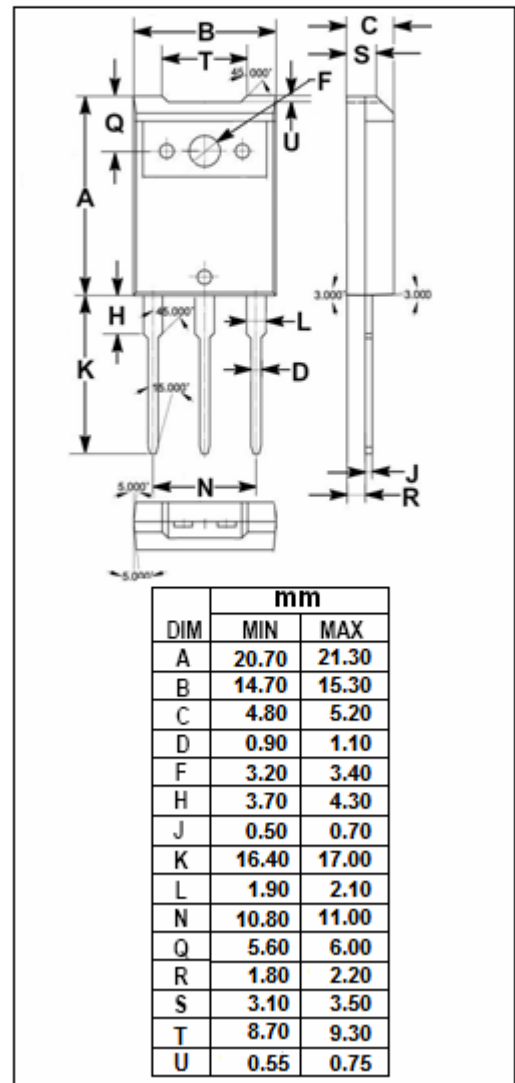
APPLICATIONS

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



ABSOLUTE MAXIMUM RATINGS(T<sub>a</sub>=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>CES</sub>	Collector- Emitter Voltage(V <sub>BE</sub> = 0)	1700	V
V <sub>EBO</sub>	Emitter-Base Voltage	7.5	V
I <sub>C</sub>	Collector Current- Continuous	12	A
I <sub>CM</sub>	Collector Current-Peak	30	A
I <sub>B</sub>	Base Current- Continuous	12	A
I <sub>BM</sub>	Base Current-Peak	20	A
P <sub>C</sub>	Collector Power Dissipation @ T <sub>C</sub> =25°C	45	W
T <sub>J</sub>	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature Range	-65~150	°C



SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	2.8	°C/W

**isc Silicon NPN Power Transistor****BU2725DF****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E=600\text{mA}; I_C=0$	7.5			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=7\text{A}; I_B=1.75\text{A}$			1.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=7\text{A}; I_B=1.75\text{A}$			0.95	V
$I_{CES}$	Collector Cutoff Current	$V_{CE}=1700\text{V}; V_{BE}=0$ $V_{CE}=1700\text{V}; V_{BE}=0; T_C=125^{\circ}\text{C}$			1.0 2.0	mA
$I_{EBO}$	Emitter Cutoff Current	$V_{EB}=7.5\text{V}; I_C=0$		110		mA
$h_{FE-1}$	DC Current Gain	$I_C=1\text{A}; V_{CE}=5\text{V}$		19		
$h_{FE-2}$	DC Current Gain	$I_C=7\text{A}; V_{CE}=1\text{V}$	3.8		7.8	
$V_{ECF}$	C-E Diode Forward Voltage	$I_F=7\text{A}$			2.2	V