

isc Silicon NPN Power Transistor
BU1508DF
DESCRIPTION

- High Voltage
- High Speed Switching
- Built-in Damper Diode
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

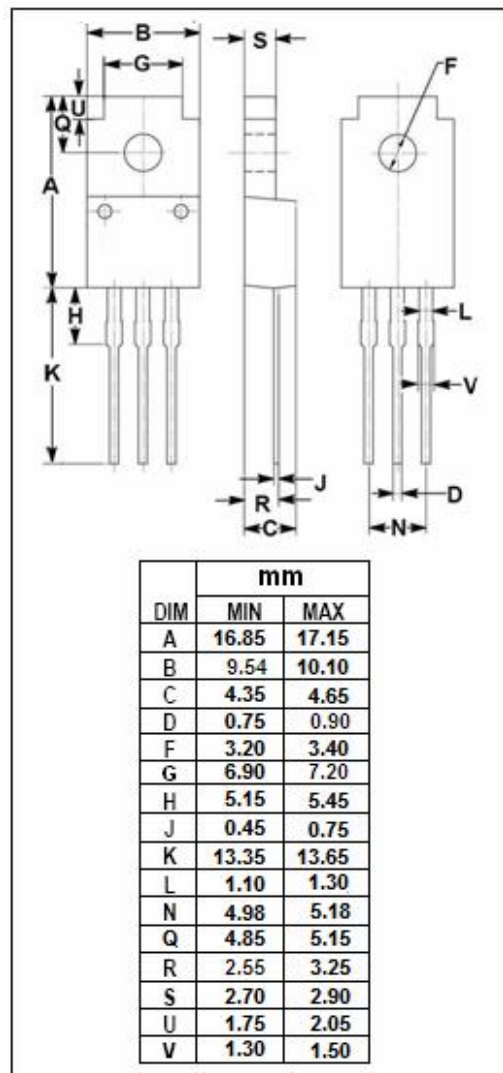
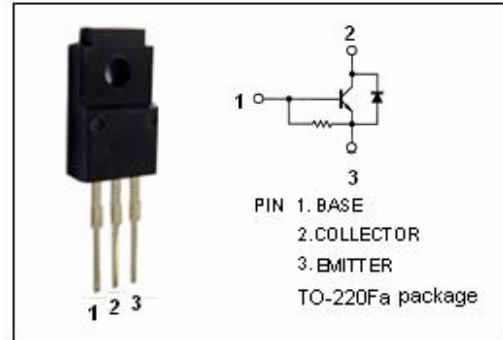
- Designed for use in horizontal deflection circuits of color TV receivers.

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CES}	Collector-Base Voltage V _{BE} = 0	1500	V
V _{CEO}	Collector-Emitter Voltage	700	V
V _{EBO}	Emitter-Base Voltage	7.5	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°C	35	W
T _j	Junction Temperature	150	°C
T _{stg}	Storage Temperature Range	-65~150	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	3.6	°C/W



ELECTRICAL CHARACTERISTICS $T_C=25^\circ\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	$I_C=50\text{mA}; I_B=0$	700			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E=600\text{mA}; I_C=0$	7.5			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=4.5\text{A}; I_B=1.1\text{A}$			1.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=4.5\text{A}; I_B=1.7\text{A}$			1.3	V
I_{CES}	Collector Cutoff Current	$V_{CE}=V_{CES}; V_{BE}=0$ $V_{CE}=V_{CES}; V_{BE}=0; T_C=125^\circ\text{C}$			1.0 2.0	mA
I_{EBO}	Emitter Cutoff Current	$V_{EB}=7.5\text{V}; I_C=0$	140		390	
h_{FE-1}	DC Current Gain	$I_C=1\text{A}; V_{CE}=5\text{V}$		13		
h_{FE-2}	DC Current Gain	$I_C=4.5\text{A}; V_{CE}=1\text{V}$	4		7	
V_{ECF}	C-E Diode Forward Voltage	$I_F=4.5\text{A}$			2.0	V

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