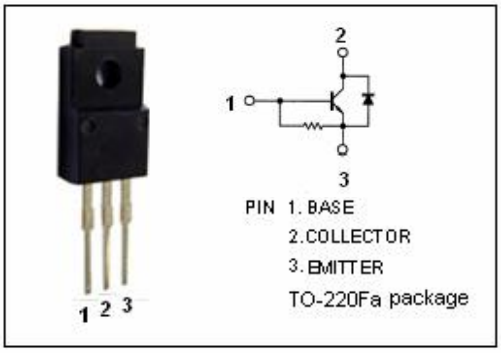
isc Silicon NPN Power Transistor — BU1506DF

DESCRIPTION

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



APPLICATIONS

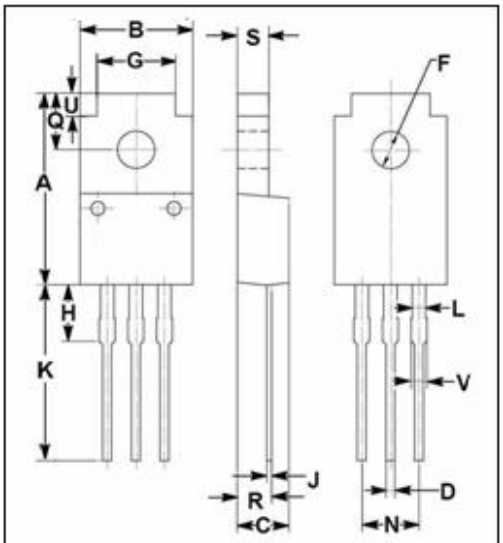
- Designed for use in horizontal deflection circuits of color TV receivers.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

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	5	A
I_{CM}	Collector Current-Peak	8	A
I_B	Base Current-Continuous	3	A
I_{BM}	Base Current-peak	8	A
P_C	Collector Power Dissipation @T_C=25℃	32	W
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-40~150	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	4.0	℃/W



DIM	mm MIN	mm MAX
A	16.85	17.15
B	9.54	10.10
C	4.35	4.65
D	0.75	0.90
F	3.20	3.40
G	6.90	7.20
H	5.15	5.45
J	0.45	0.75
K	13.35	13.65
L	1.10	1.30
N	4.98	5.18
Q	4.85	5.15
R	2.55	3.25
S	2.70	2.90
U	1.75	2.05
V	1.30	1.50

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	I_C= 50mA; I_B= 0	700			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	I_E= 600mA; I_C= 0	7.5			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 3A; I_B= 0.79A			5.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 3A; I_B= 0.79A			1.1	V
I_{CES}	Collector Cutoff Current	V_{CE}= V_{CES}; V_{BE}= 0 V_{CE}= V_{CES}; V_{BE}= 0;T_C=125℃			1.0 2.0	mA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 7.5V; I_C= 0	90		180	
h_{FE-1}	DC Current Gain	I_C= 0.3A ; V_{CE}= 5V		12		
h_{FE-2}	DC Current Gain	I_C= 3A ; V_{CE}= 5V	3.8		7.5	
V_{ECF}	C-E Diode Forward Voltage	I_F= 3A			2.0	V