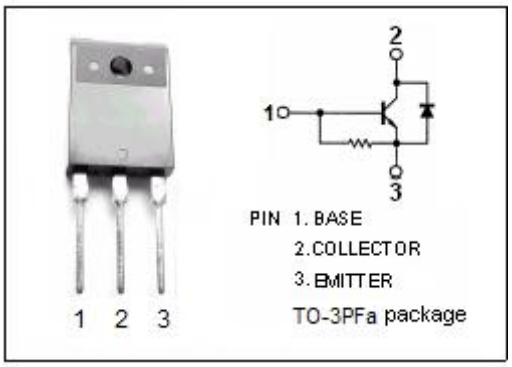
isc Silicon NPN Power Transistor — BU2520DF

DESCRIPTION

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



APPLICATIONS

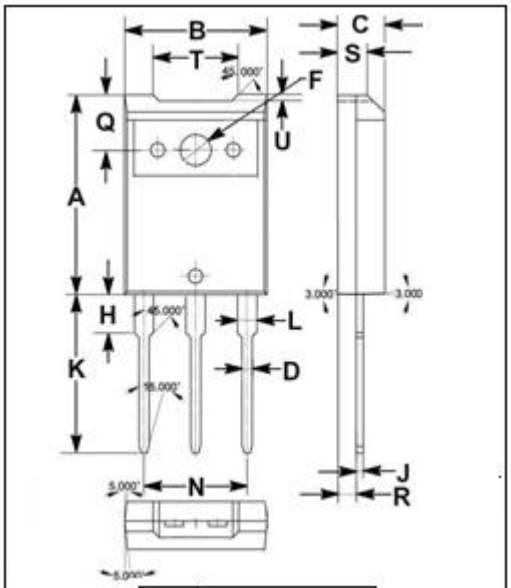
- For use in horizontal deflection circuits of large screen color TV receivers

ABSOLUTE MAXIMUM RATINGS (T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	1500	V
V_{CEO}	Collector-Emitter Voltage	800	V
V_{EBO}	Emitter-Base Voltage	7.5	V
I_C	Collector Current-Continuous	10	A
I_{CM}	Collector Current-peak	25	A
I_B	Base Current-Continuous	6	A
I_{BM}	Base Current-peak	9	A
P_C	Collector Power Dissipation @T_C=25℃	45	W
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃

THERMAL CHARACTERISTICS

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



DIM	mm MIN	MAX
A	20.70	21.30
B	14.70	15.30
C	4.80	5.20
D	0.90	1.10
F	3.20	3.40
H	3.70	4.30
J	0.50	0.70
K	16.40	17.00
L	1.90	2.10
N	10.80	11.00
Q	5.60	6.00
R	1.80	2.20
S	3.10	3.50
T	8.70	9.30
U	0.55	0.75

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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	800			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	I_E= 600mA; I_C= 0	7.5	13.5		V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 6A; I_B= 1.2A			5.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 6A; I_B= 1.2A			1.1	V
I_{CES}	Collector Cutoff Current	V_{CE}= BV_{CES}; V_{BE}= 0 V_{CE}= BV_{CES}; V_{BE}= 0;T_C=125℃			1.0 2.0	mA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 7.5V; I_C= 0	100		300	mA
h_{FE-1}	DC Current Gain	I_C= 1A; V_{CE}= 5V		13		
h_{FE-2}	DC Current Gain	I_C= 6A; V_{CE}= 5V	5	7	9.5	
V_{ECF}	C-E Diode Forward Voltage	I_F= 6A			2.2	V
C_{OB}	Output Capacitance	I_E= 0 ; V_{CB}= 10V;f_{test}= 1MHz		115		pF