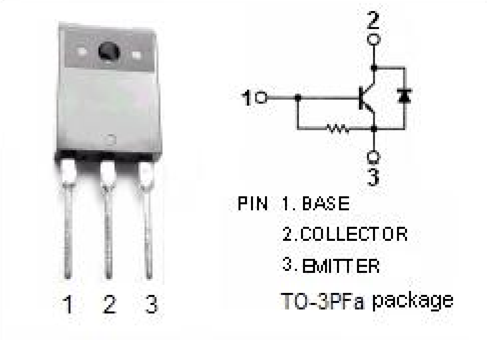
isc Silicon NPN Power Transistor BU2525DF

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.

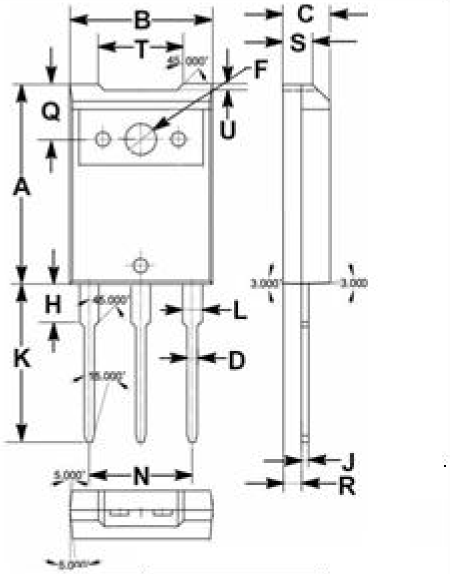


ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CES}	Collector-Base Voltage V_{BE}= 0	1500	V
V_{CEO}	Collector-Emitter Voltage	800	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	8	A
I_{BM}	Base Current-peak	12	A
P_C	Collector Power Dissipation @T_C=25℃	45	W
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-65~150	℃

THERMAL CHARACTERISTICS

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



DIM	mm MIN	mm 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

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			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 8A; I_B= 1.6A			5.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 8A; I_B= 1.6A			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}= 6V; I_C= 0	72		218	
h_{FE-1}	DC Current Gain	I_C= 1A ; V_{CE}= 5V		11		
h_{FE-2}	DC Current Gain	I_C= 8A ; V_{CE}= 5V	5		9.5	
V_{ECF}	C-E Diode Forward Voltage	I_F= 8A			2.0	V