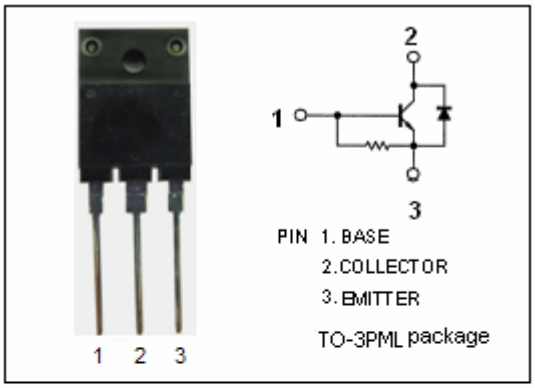
Silicon NPN Power Transistor BU2507DX



DESCRIPTION

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

APPLICATIONS

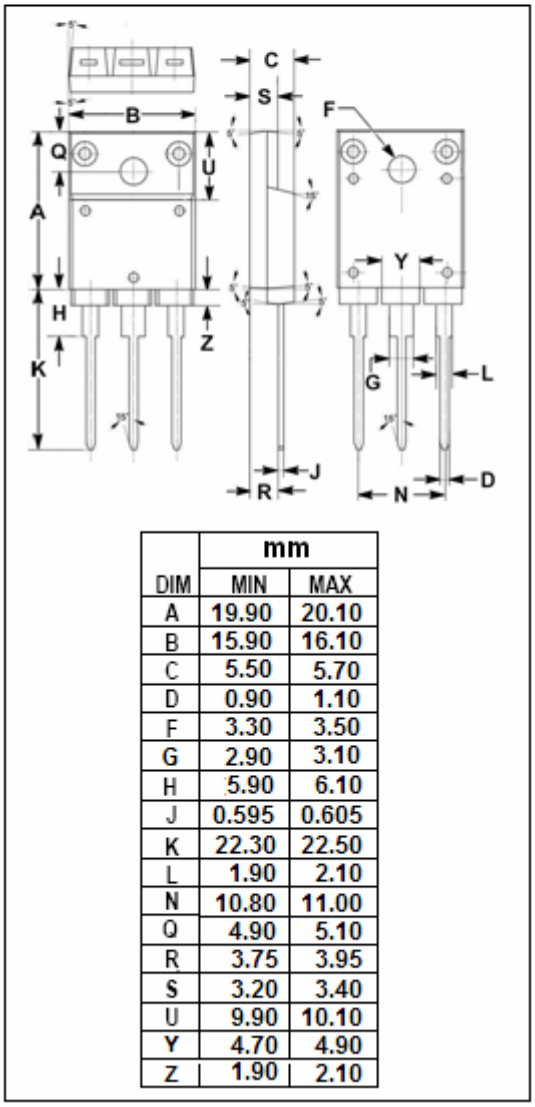
- Designed for use in horizontal deflection circuits of coluor TV receivers and computer monitors.

ABSOLUTE MAXIMUM RATINGS (T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	1200	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℃	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	K/W



DIM	mm MIN	MAX
A	19.90	20.10
B	15.90	16.10
C	5.50	5.70
D	0.90	1.10
F	3.30	3.50
G	2.90	3.10
H	5.90	6.10
J	0.595	0.605
K	22.30	22.50
L	1.90	2.10
N	10.80	11.00
Q	4.90	5.10
R	3.75	3.95
S	3.20	3.40
U	9.90	10.10
Y	4.70	4.90
Z	1.90	2.10

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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= 100mA ;I_B= 0,L= 25mH	700			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= 4A ;I_B= 0.8A			5.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 4A ;I_B= 0.8A			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		160		mA
h_{FE-1}	DC Current Gain	I_C= 1A ; V_{CE}= 5V		14		
h_{FE-2}	DC Current Gain	I_C= 4A ; V_{CE}= 5V	5	7	9	
V_{ECF}	C-E Diode Forward Voltage	I_F= 4A			2.0	V
C_{OB}	Output Capacitance	I_E= 0 ; V_{CB}= 10V;f_{test}= 1MHz		68		pF