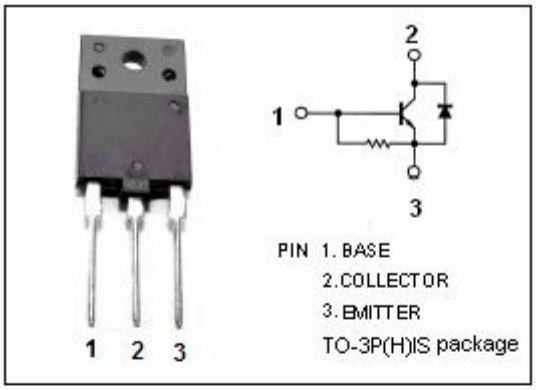
isc Silicon NPN Power Transistor — BU2527DX

DESCRIPTION

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



APPLICATIONS

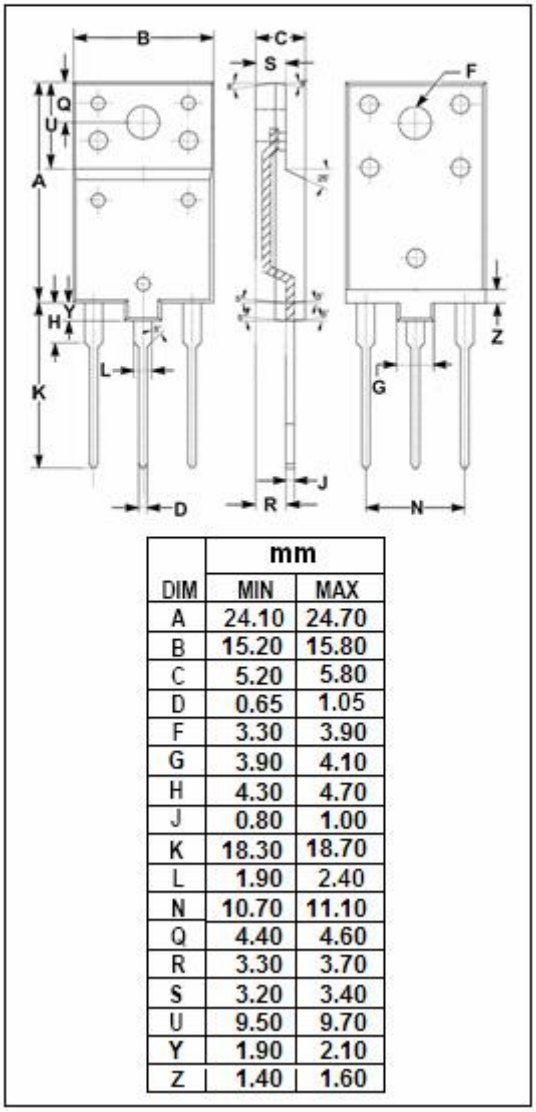
- Designed for use in horizontal deflection circuits of high resolution monitors.

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	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	-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	24.10	24.70
B	15.20	15.80
C	5.20	5.80
D	0.65	1.05
F	3.30	3.90
G	3.90	4.10
H	4.30	4.70
J	0.80	1.00
K	18.30	18.70
L	1.90	2.40
N	10.70	11.10
Q	4.40	4.60
R	3.30	3.70
S	3.20	3.40
U	9.50	9.70
Y	1.90	2.10
Z	1.40	1.60

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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			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}= $BV_{CES;}$ 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}= 6V; I_C= 0		110		mA
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	7	10	
V_{ECF}	C-E Diode Forward Voltage	I_F= 8A			2.0	V
C_{OB}	Output Capacitance	I_E= 0 ; V_{CB}= 10V;f_{test}= 1MHz		145		pF