

isc Silicon NPN Power Transistor

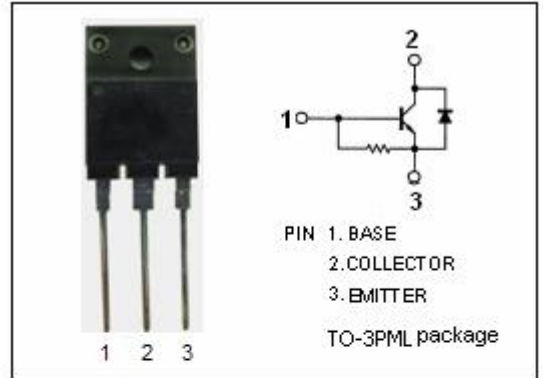
BU2527DX

DESCRIPTION

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

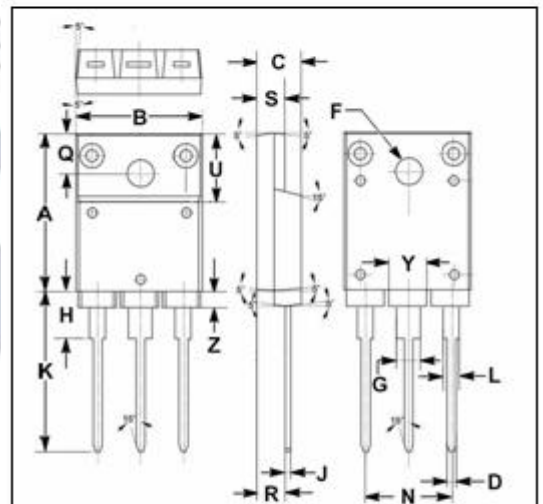
APPLICATIONS

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



ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

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°C	45	W
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature Range	-55~150	°C



DIM	mm	
	MIN	MAX
A	19.90	20.10
B	15.75	16.10
C	5.50	5.70
D	0.90	1.10
F	3.30	3.50
G	2.90	3.20
H	5.90	6.10
J	0.595	0.70
K	21.10	22.50
L	1.90	2.25
N	10.80	11.00
Q	4.90	5.10
R	3.75	3.95
S	3.20	3.60
U	9.90	10.10
Y	4.20	4.90
Z	1.90	2.10

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	2.8	K/W

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ELECTRICAL CHARACTERISTICS

T_c=25°C 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°C			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