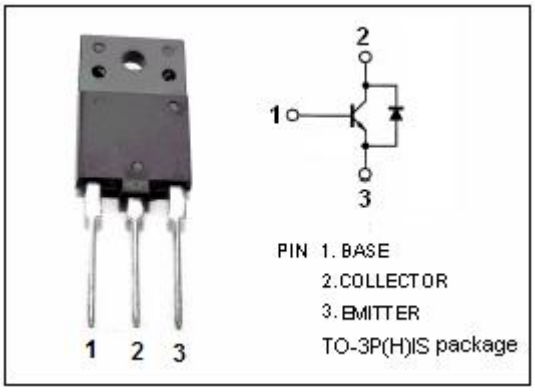
isc Silicon NPN Power Transistor — BU508DX

DESCRIPTION

- High Voltage-V_{CES}= 1500V(Min.)
- Collector Current- I_C = 8.0A
- Built-in Integrated Diode
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



APPLICATIONS

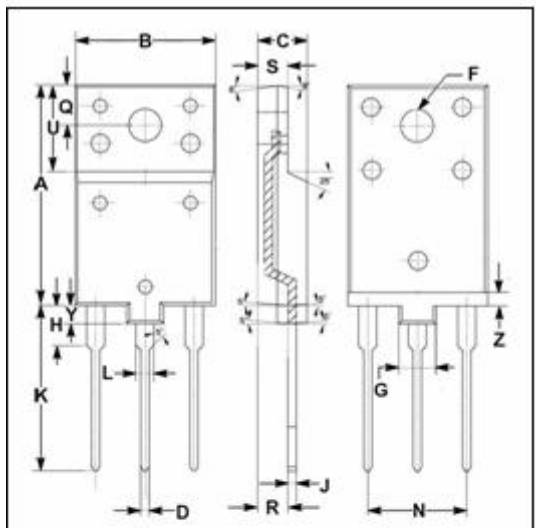
- Designed for use in large screen color deflection circuits .

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CES}	Collector-Emitter Voltage	1500	V
V_{CEO}	Collector-Emitter Voltage	700	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	8.0	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	-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	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	700			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 4.5A; I_B= 1.6A			1.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 4.5A; I_B= 1.6A			1.3	V
I_{CES}	Collector Cutoff Current	V_{CE}= 1500V; V_{BE}= 0 V_{CE}= 1500V; V_{BE}= 0; T_C= 125℃			1.0 2.0	mA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 5.0V; I_C= 0			300	mA
h_{FE}	DC Current Gain	I_C= 0.1A; V_{CE}= 5V	6		30	
f_T	Current-Gain—Bandwidth Product	I_C= 0.1A; V_{CE}= 5V		7		MHz
V_{ECF}	C-E Diode Forward Voltage	I_F= 4.5A			2.0	V

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