

isc Silicon NPN Power Transistors
3DD880X
DESCRIPTION

- X: DC Current Gain $-h_{FE} = 55-75@ I_C = 0.5A$
- Collector-Emitter Breakdown Voltage:
: $V_{(BR)CEO} = 100V(\text{Min})$
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

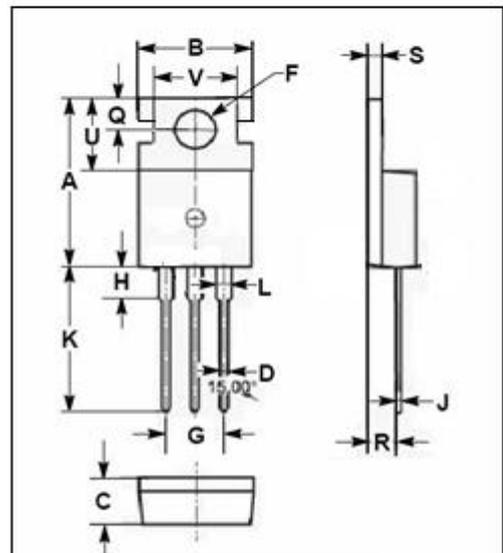
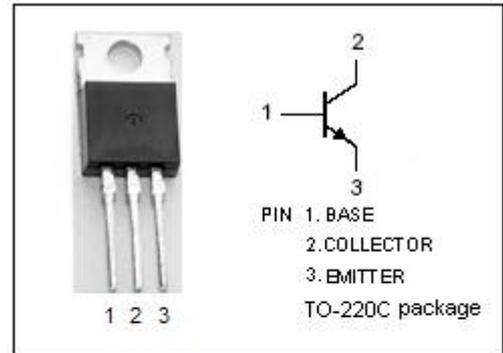
- Designed for use in general purpose amplifier and switching applications.

ABSOLUTE MAXIMUM RATINGS($T_a = 25^\circ\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	100	V
V_{CEO}	Collector-Emitter Voltage	100	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	3	A
I_{CM}	Collector Current-Pulse	5	A
P_C	Collector Power Dissipation $T_c = 25^\circ\text{C}$	90	W
T_j	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-65~150	$^\circ\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	1.39	$^\circ\text{C}/\text{W}$



DIM	mm	
	MIN	MAX
A	15.50	15.90
B	9.80	10.20
C	4.20	4.50
D	0.70	0.90
F	3.40	3.70
G	4.98	5.18
H	2.68	2.90
J	0.44	0.60
K	12.80	13.40
L	1.20	1.45
Q	2.70	2.90
R	2.30	2.70
S	1.29	1.35
U	6.45	6.65
V	8.66	8.86

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ELECTRICAL CHARACTERISTICS

T_C=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = 30mA; I _B = 0	100		V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 3A; I _B = 0.4A		1.2	V
V _{BE(on)}	Base-Emitter On Voltage	I _C = 3A; V _{CE} = 4V		1.8	V
I _{CES}	Collector Cutoff Current	V _{CE} = 100V; V _{EB} = 0		0.2	mA
I _{CEO}	Collector Cutoff Current	V _{CE} = 60V; I _B = 0		0.1	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C = 0		0.5	mA
h _{FE}	DC Current Gain	I _C = 0.5A ; V _{CE} = 15V	55	75	

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