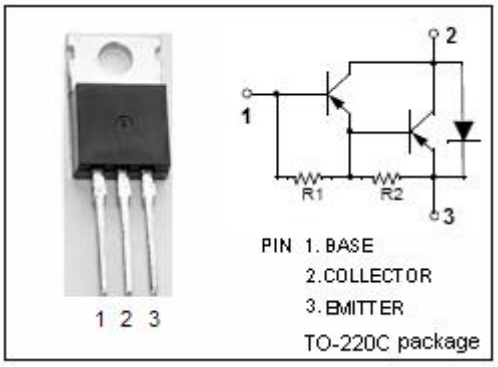
isc Silicon PNP Darlington Power Transistor 2SB1550

DESCRIPTION

- Collector-Emitter Breakdown Voltage-
  : $V_{(BR)CEO}$= -80V(Min)
- High DC Current Gain-
  : h_{FE}= 1000(Min)@I_C= -5A
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

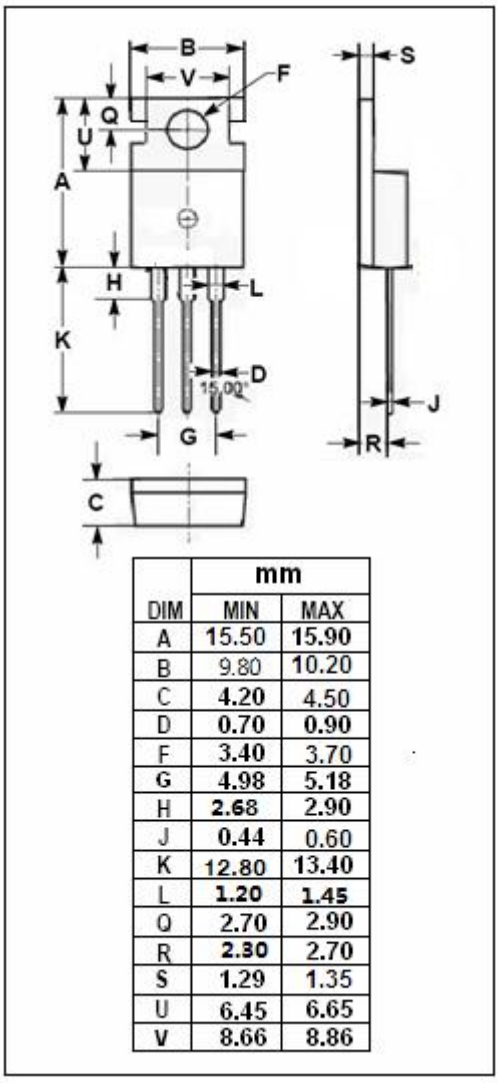


APPLICATIONS

- Driver for chopper regulator, DC motor driver and general purpose applications.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-80	V
V_{CEO}	Collector-Emitter Voltage	-80	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current-Continuous	-10	A
I_{CP}	Collector Current-Pulse	-15	A
P_C	Collector Power Dissipation @ T_C=25℃	40	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃



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℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C= -10mA; I_B= 0	-80			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= -5A; I_B= -5mA			-1.5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= -5A; I_B= -5mA			-2.0	V
I_{CBO}	Collector Cutoff Current	V_{CB}= -80V; I_E=0			-10	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= -5V; I_C=0			-3	mA
h_{FE}	DC Current Gain	I_C= -5A; V_{CE}= -3V	1000		20000	
C_{OB}	Output Capacitance	I_E=0; V_{CB}= -10V; f_{test}= 1.0MHz		90		pF
f_T	Current-Gain—Bandwidth Product	I_E= -0.5A; V_{CE}= -5V		12		MHz