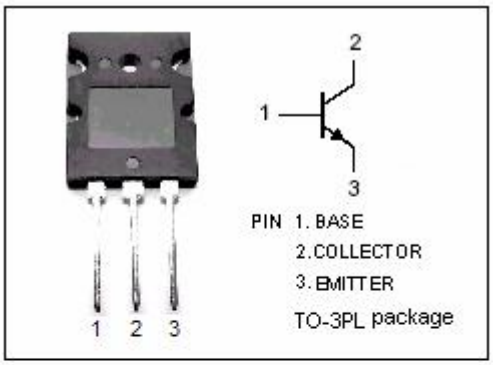
isc Silicon PNP Power Transistor — 2SB1153



DESCRIPTION

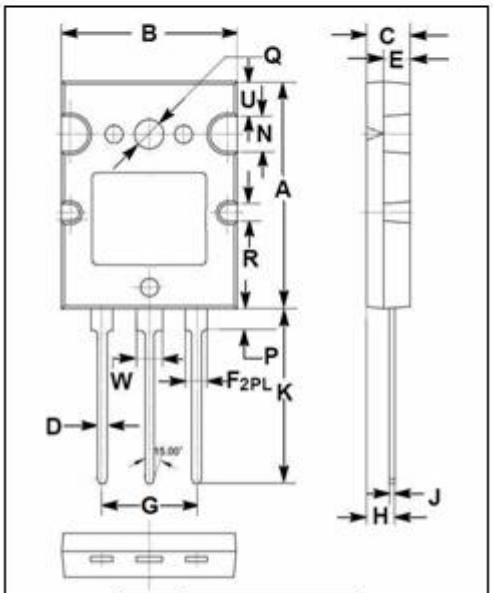
- Collector-Emitter Breakdown Voltage-
  : $V_{(BR)CEO}$= -170V(Min)
- Good Linearity of h_{FE}
- Wide Area of Safe Operation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for high power applications

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-170	V
V_{CEO}	Collector-Emitter Voltage	-170	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-15	A
I_{CP}	Collector Current-Pulse	-25	A
P_C	Collector Power Dissipation @ T_C=25℃	150	W
	Collector Power Dissipation @ T_a=25℃	3.5	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃



DIM	mm MIN	MAX
A	25.50	26.50
B	19.80	20.20
C	4.50	5.50
D	0.90	1.10
E	2.80	3.20
F	2.40	2.60
G	10.80	11.00
H	3.10	3.30
J	0.50	0.70
K	20.00	21.00
N	3.90	4.50
P	2.40	2.60
Q	3.10	3.50
R	1.90	2.60
U	3.90	4.10
W	2.90	3.25

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= -10A; I_B= -1A			-2.5	V
$V_{BE(on)}$	Base -Emitter On Voltage	I_C= -8A; V_{CE}= -5V			-1.8	V
I_{CBO}	Collector Cutoff Current	V_{CB}= -180V; I_E=0			-50	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= -3V; I_C=0			-50	μA
h_{FE-1}	DC Current Gain	I_C= -20mA; V_{CE}= -5V	20			
h_{FE-2}	DC Current Gain	I_C= -1A; V_{CE}= -5V	60		200	
h_{FE-3}	DC Current Gain	I_C= -8A; V_{CE}= -5V	20			
C_{OB}	Output Capacitance	I_E= 0; V_{CB}= -10V; f_{test}= 1.0MHz		230		pF
f_T	Current-Gain—Bandwidth Product	I_C= -0.5A; V_{CE}= -5V		20		MHz

◆ **h_{FE-2}Classifications**

Q	S	P
60-120	80-160	100-200

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