

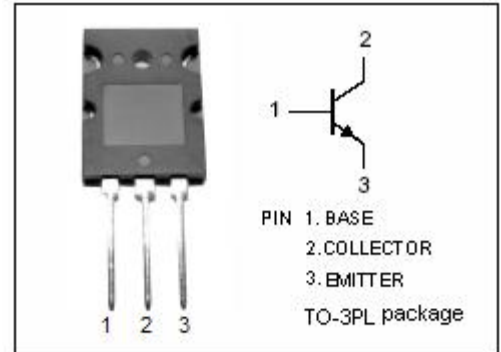
isc Silicon NPN Power Transistor

DESCRIPTION

- Collector-Emitter Breakdown Voltage
 $-V_{(BR)CEO}=300V(\text{Min})$
- Collector-Emitter Saturation Voltage
 $-V_{CE(sat)}= 3.0V(\text{Max}) @I_C= 8A$

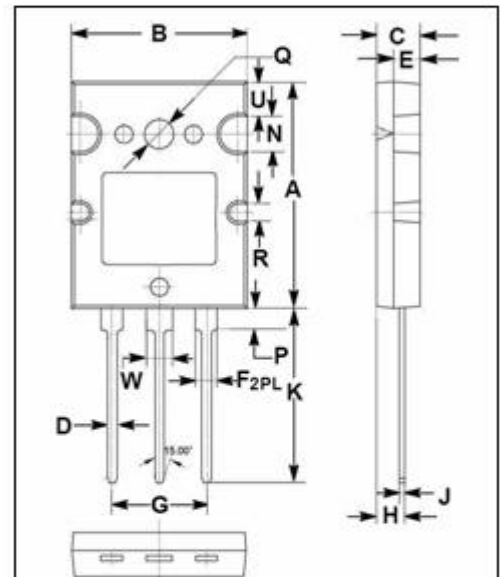
APPLICATIONS

- Designed for power amplifier, high speed switching and regulated power supply applications.



ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CBO}	Collector-Base Voltage	300	V
V _{CEO}	Collector-Emitter Voltage	300	V
V _{EBO}	Emitter-Base Voltage	5	V
I _{CM}	Collector Current-Continuous	25	A
I _B	Base Current	1.5	A
P _{CM}	Collector Power Dissipation	250	W
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature Range	-55~150	°C



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

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	0.5	°C/W



ISBL3019N

eq 2SC5200

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ELECTRICAL CHARACTERISTICS (T_c=25°C unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
V _{CBO}	Collector-Base Breakdown Voltage	I _C =5mA; I _E = 0	300	--	--	V
V _{CEO}	Collector-Emitter Breakdown Voltage	I _C =10mA; I _B = 0	300	--	--	V
V _{EBO}	Emitter-Base Breakdown Voltage	I _E =5mA; I _C = 0	5	--	--	V
I _{CBO}	Collector Cut-off Current	V _{CB} = 250V; I _E = 0	--	--	5.0	uA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C = 0	--	--	5.0	uA
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 8A; I _B = 0.8A	--	0.4	3.0	V
V _{BE(on)}	Base-Emitter Turn-On Voltage	V _{CE} = 5V; I _C = 7A;	--	1.0	1.5	V
h _{FE}	DC Current Gain	V _{CE} = 5V; I _C = 1A	55	--	160	
h _{FE}	DC Current Gain	V _{CE} = 5V; I _C =7A;	35	60	--	

◆ hFE Classifications

R	O
55-110	80-160

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