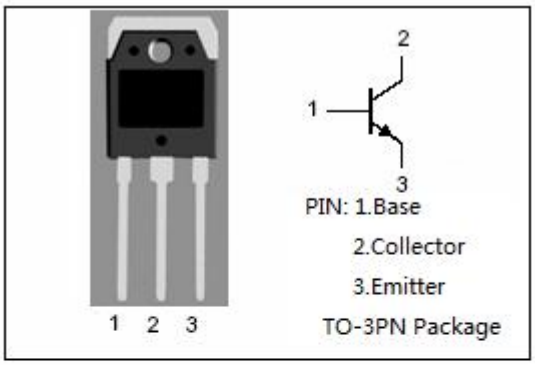
isc Silicon NPN Power Transistor — 2SD1373

DESCRIPTION

- High Collector-Base Voltage-
  : V_{CBO}= 300V(Min.)
- Good Linearity of h_{FE}
- High Speed Switching
- Wide Area of Safe Operation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

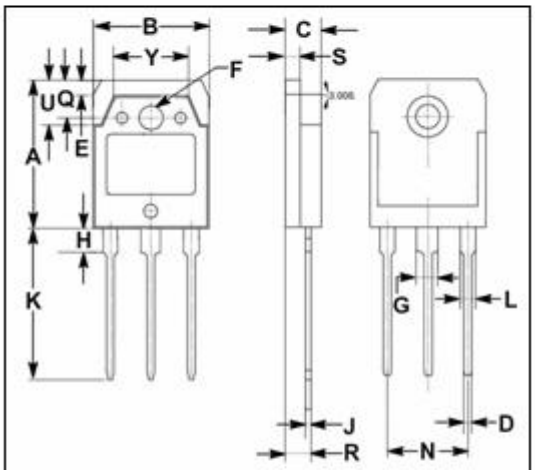


APPLICATIONS

- Designed for use in high-voltage,high-speed,power switching regulators and general purpose applications.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	300	V
V_{CEO}	Collector-Emitter Voltage	300	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	4.0	A
I_{CM}	Collector Current-Peak	6.0	A
I_B	Base Current	1.0	A
P_C	Collector Power Dissipation@T_C=25℃	50	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-65~150	℃



DIM	mm MIN	mm MAX
A	19.60	20.30
B	15.50	15.70
C	4.70	4.90
D	0.90	1.10
E	1.90	2.10
F	3.40	3.60
G	2.90	3.20
H	3.20	3.40
J	0.595	0.605
K	19.80	20.70
L	1.90	2.20
N	10.89	10.91
Q	4.90	5.10
R	3.35	3.45
S	1.995	2.100
U	5.90	6.20
Y	9.90	10.10

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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= 10mA; I_B= 0	300			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 3A; I_B= 0.6A			1.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 3A; I_B= 0.6A			1.2	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 300V; I_E= 0			0.1	mA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 7V; I_C= 0			0.1	mA
h_{FE-1}	DC Current Gain	I_C= 0.3A ; V_{CE}= 5V	30		150	
h_{FE-2}	DC Current Gain	I_C= 3A ; V_{CE}= 5V	10			
f_T	Current-Gain—Bandwidth Product	I_C= 0.5A; V_{CE}= 10V, f_{test}= 1MHz	5			MHz