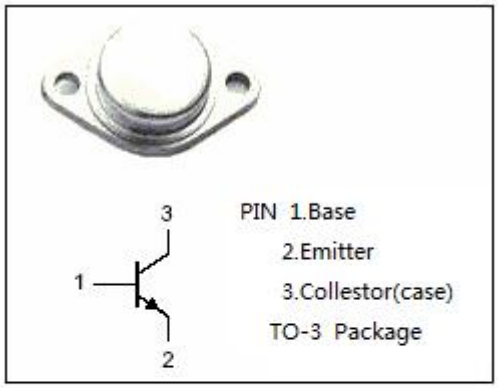
isc Silicon NPN Power Transistor 2SD535



DESCRIPTION

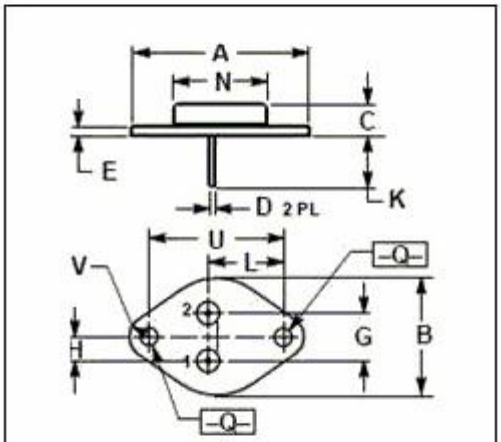
- Collector-Emitter Sustaining Voltage-
  : $V_{CEO(SUS)}$ = 120V(Min)
- Excellent Safe Operating Area
- High Current Capability
- Good Linearity of h_{FE}
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for high speed, high current, high power applications.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	250	V
V_{CEO}	Collector-Emitter Voltage	120	V
V_{EBO}	Emitter-Base Voltage	10	V
I_C	Collector Current-Continuous	12	A
I_{CM}	Collector Current-Peak	15	A
P_C	Collector Power Dissipation @ T_C=25℃	150	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-65~150	℃



DIM	mm MIN	MAX
A	39.00	
B	25.30	26.67
C	7.80	8.50
D	0.90	1.10
E	1.40	1.60
G	10.92	
H	5.46	
K	11.30	13.50
L	16.75	17.05
N	19.40	19.62
Q	4.00	4.20
U	30.00	30.20
V	4.30	4.50

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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= 30mA ;I_B= 0	120			V
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	I_C= 6A; I_B= 0.6A			0.5	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation Voltage	I_C= 10A; I_B= 1A			1.2	V
$V_{BE(sat)-1}$	Base-Emitter Saturation Voltage	I_C= 6A; I_B= 0.6A			1.0	V
$V_{BE(sat)-2}$	Base-Emitter Saturation Voltage	I_C= 10A; I_B= 1A			1.5	V
I_{CBO}	Collector Cutoff Current	V_{CB}=120V; I_E=0			0.1	mA
I_{EBO}	Emitter Cutoff current	V_{EB}=9V; I_C=0			0.1	mA
h_{FE-1}	DC Current Gain	I_C= 2A ; V_{CE}= 6V	60		200	
h_{FE-2}	DC Current Gain	I_C= 10A ; V_{CE}= 6V	30			
Switching Times;						
t_{on}	Turn-on Time	I_C= 10A ;I_{B1}= -I_{B2}= 1.0A;			1.5	μs
t_s	Storage Time				4.5	μs
t_f	Fall Time				2.0	μs

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