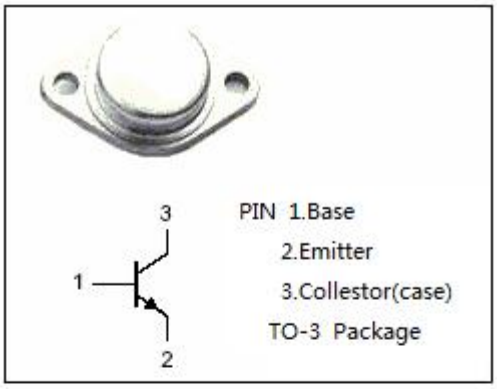
isc Silicon NPN Power Transistor BD368

DESCRIPTION

- Collector-Emitter Breakdown Voltage-
  : $V_{(BR)CEO}$= 80V(Min)
- Excellent Safe Operating Area
- Complement to Type BD369
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



APPLICATIONS

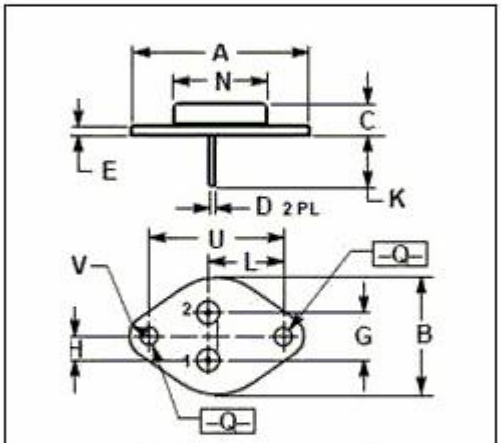
- Designed for linear amplifiers, series pass regulators, and inductive switching applications.

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	5	V
I_C	Collector Current-Continuous	25	A
I_B	Base Current-Continuous	5	A
P_C	Collector Power Dissipation@T_C=25℃	200	W
T_J	Junction Temperature	175	℃
T_{stg}	Storage Temperature Range	-65~175	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	0.875	℃/W



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	80			V
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	I_C=10A; I_B=1A			1.0	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation Voltage	I_C=20A; I_B=2A			1.5	V
$V_{BE(sat)-1}$	Base-Emitter Saturation Voltage	I_C=10A; I_B=1A			1.5	V
$V_{BE(sat)-2}$	Base-Emitter Saturation Voltage	I_C=20A; I_B=2A			2.0	V
I_{CBO}	Collector Cutoff Current	V_{CB}=80V; I_E=0			0.1	mA
I_{CEO}	Collector Cutoff Current	V_{CE}= 80V; I_B= 0			0.5	mA
I_{EBO}	Emitter Cutoff current	V_{EB}=5V; I_C=0			0.1	mA
h_{FE-1}	DC Current Gain	I_C=1A ; V_{CE}=5V	40			
h_{FE-2}	DC Current Gain	I_C=15A ; V_{CE}=5V	25		100	
h_{FE-2}	DC Current Gain	I_C=25A ; V_{CE}=5V	5			
f_T	Current-Gain—Bandwidth Product	I_C=1A;V_{CE}=10V;f=1.0MHz	4.0			MHz