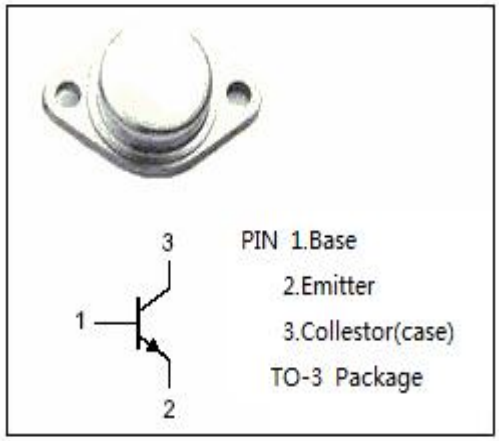
isc Silicon NPN Power Transistor 2SD218

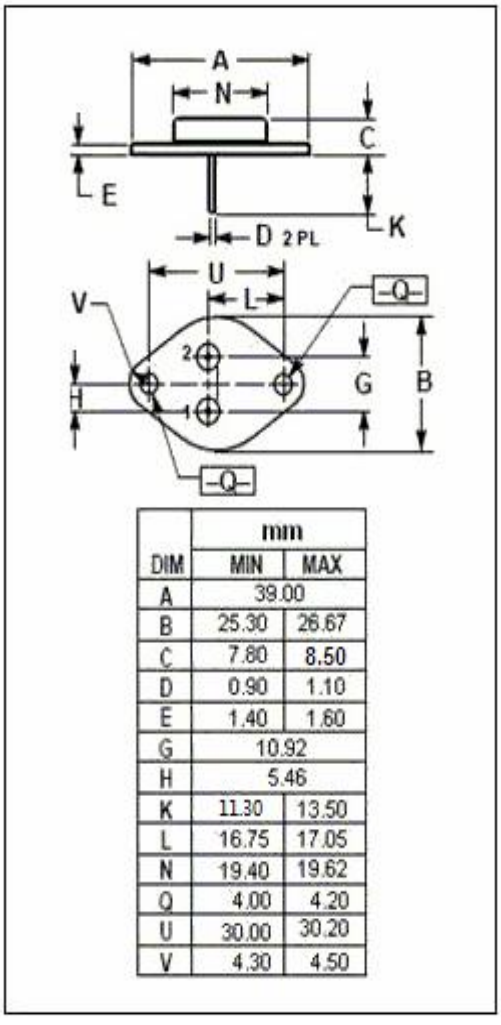


DESCRIPTION

- Collector-Emitter Breakdown Voltage-
  : $V_{(BR)CEO}$= 150V (Min)
- Low Collector-Emitter Saturation Voltage-
  : $V_{CE(sat)}$= 1.5V (Max.)@ I_C= 7A
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Low saturation voltage
- Excellent current gain linearity



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

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	MAX	UNIT
V_{CBO}	Collector-Base Voltage	150	V
V_{CEO}	Collector-Emitter Voltage	100	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	7	A
I_B	Base Current-Continuous	2	A
P_C	Collector Power Dissipation @T_C=25℃	60	W
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-65~150	℃

isc Silicon NPN Power Transistor 2SD218

ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 7A; I_B= 0.7A		0.6	1.5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 7A; I_B= 0.7A		1.2	1.5	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 80V; I_E= 0			0.5	mA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 5V; I_C= 0			0.5	mA
h_{FE-1}	DC Current Gain	I_C= 4A; V_{CE}= 5V	30	60	120	
h_{FE-2}	DC Current Gain	I_C= 7A; V_{CE}= 5V	20	40		
f_T	Current-Gain—Bandwidth Product	I_C= 0.2A; V_{CE}= 10V		10		MHz

◆ **h_{FE-1}Classifications**

M	L	K
30-60	45-90	60-120