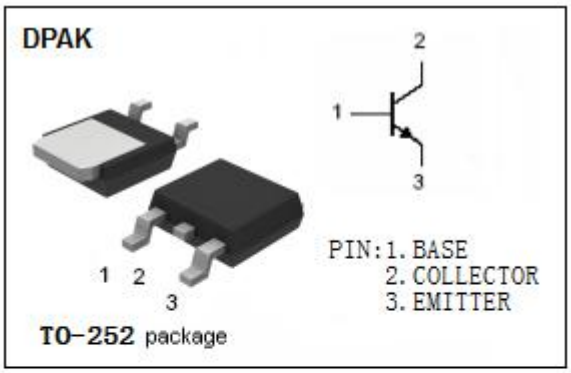
isc Silicon NPN Power Transistor — 2SD1918

DESCRIPTION

- Suitable for middle power drivers
- High voltage:V_{CEO}=160V
- Complementary PNP types:2SB1275
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

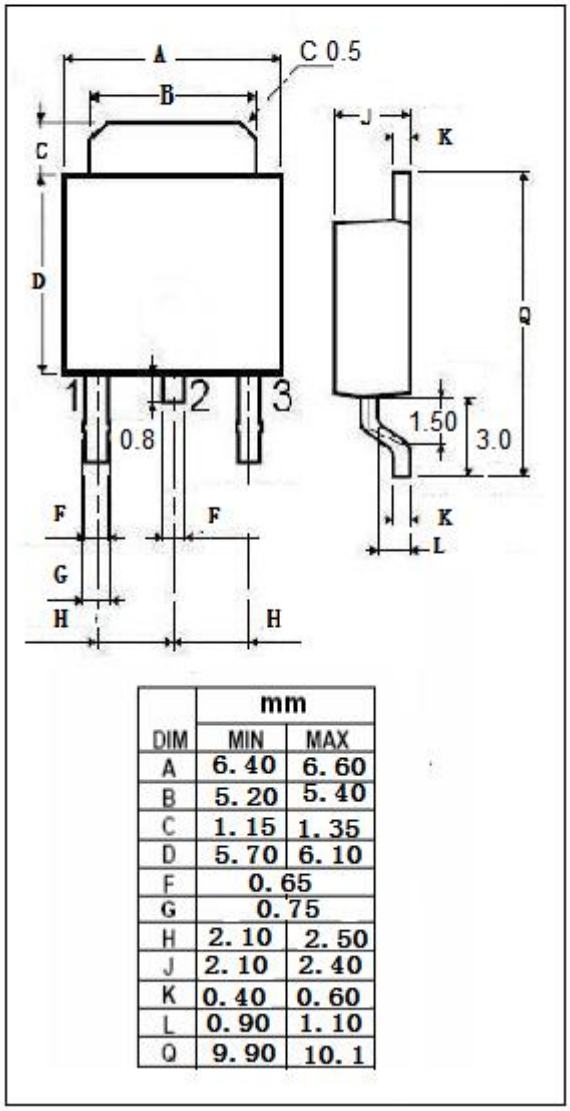


APPLICATIONS

- Motor drivers,LED driver,Power supply

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	160	V
V_{CEO}	Collector-Emitter Voltage	160	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	1.5	A
I_{CM}	Collector Current-Peak	3.0	A
P_C	Collector Power Dissipation @ T_C=25℃	10	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃



DIM	mm MIN	MAX
A	6.40	6.60
B	5.20	5.40
C	1.15	1.35
D	5.70	6.10
F	0.65	
G	0.75	
H	2.10	2.50
J	2.10	2.40
K	0.40	0.60
L	0.90	1.10
Q	9.90	10.1

isc Silicon NPN Power Transistor 2SD1918

ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
BV_{CBO}	Collector-Base breakdown voltage	I_C=50uA	160			V
BV_{CEO}	Collector-Emitter breakdown voltage	I_C=1mA	160			V
BV_{EBO}	Emitter-Base breakdown voltage	I_E=50uA	6			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 1A; I_B= 100mA			2.0	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 120V; I_E= 0			1.0	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}=4V; I_C= 0			1.0	μA
h_{FE}	DC Current Gain	I_C= 0.1A; V_{CE}= 5V	82		180	
C_{OB}	Output Capacitance	I_E= 0; V_{CB}= 10V; f= 1.0MHz		30		pF
f_T^{NOTE}	Current-Gain—Bandwidth Product	I_C= 0.1A; V_{CE}= 10V,f= 100MHz		50		MHz

NOTE:Pulsed

◆ **h_{FE} Classifications**

P
82-180