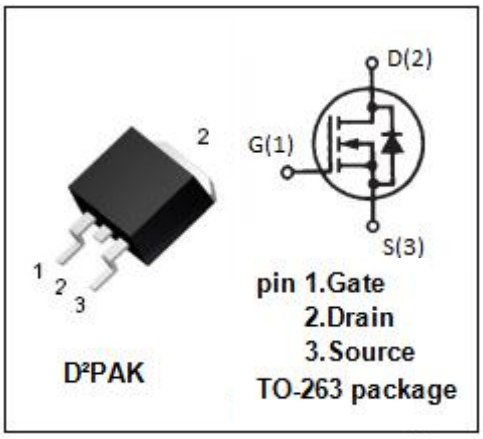
isc N-Channel MOSFET Transistor IPB80N08S2L-07

DESCRIPTION

- Drain Current –I_D= 80A@ T_C=25℃
- Drain Source Voltage- V_{DSS}=75V(Min)
- Fast Switching Speed
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



APPLICATIONS

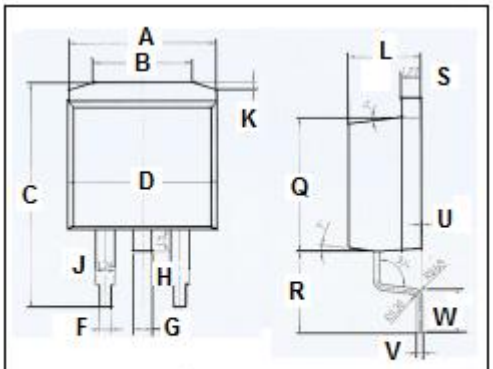
- Switch Mode Power Supply (SMPS)
- Uninterruptible Power Supply (UPS)
- High current switching applications
- DC-DC converter and motor drive applications

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	ARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage (V_{GS}=0)	75	V
V_{GS}	Gate-Source Voltage	±20	V
I_D	Drain Current-continuous@ T_C=25℃	80	A
I_{DM}	Drain Current-Single Pluse	320	A
P_{tot}	Total Dissipation@T_C=25℃	250	W
T_j	Max. Operating Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	0.5	℃/W



DIM	mm MIN	MAX
A	10	
B	6.6	6.8
C	15.23	15.25
D	10.15	10.17
F	0.76	0.78
G	1.26	1.28
H	1.4	1.6
J	1.33	1.35
K	0.4	0.6
L	4.6	4.8
Q	8.69	8.71
R	5.28	5.30
S	1.26	1.28
U	0.0	0.2
V	0.37	0.39
W	2.80	2.82

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• **ELECTRICAL CHARACTERISTICS (T_C=25℃)**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	V_{GS}=0; I_D= 1mA	75	-	-	V
$V_{GS(TH)}$	Gate Threshold Voltage	V_{DS} = V_{GS}, I_D = 250μA	1.2	1.6	2.0	V
$R_{DS(ON)}$	Drain-Source On-stage Resistance	V_{GS}= 10V; I_D= 67A	-	6.0	7.1	mΩ
I_{GSS}	Gate Source Leakage Current	V_{GS}= ±20V; V_{DS}= 0	-	-	±100	nA
I_{DSS}	Zero Gate Voltage Drain Current	V_{DS} = 75V, V_{GS} = 0V, T_J = 25ºC	-	-	1	μA
V_{SD}	Diode Forward Voltage	I_S=80A; V_{GS}=0V	-	-	1.3	V