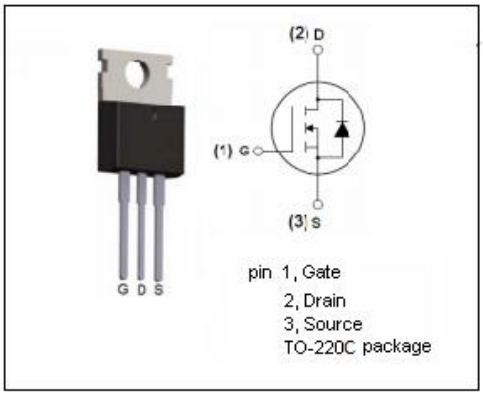
isc N-Channel MOSFET Transistor IXKP20N60C5



FEATURES

- Drain Current –I_D= 20A@ T_C=25℃
- Drain Source Voltage-
  : V_{DSS}= 600V(Min)
- Static Drain-Source On-Resistance
  : $R_{DS(on)}$ = 180mΩ (Max)
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

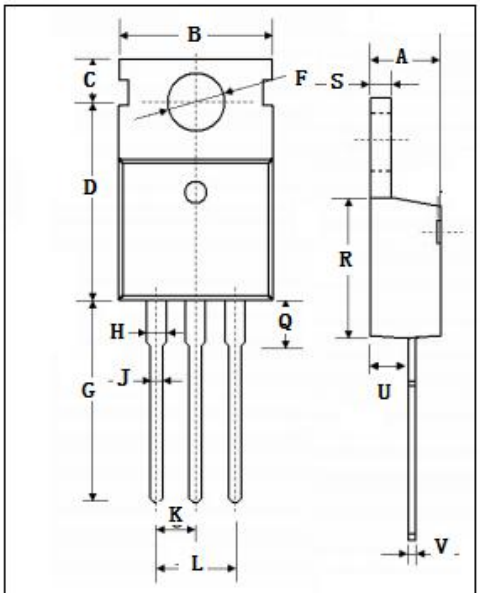
- Switched mode power supplies
- Uninterruptible power supplies
- Power factor correction

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	600	V
V_{GS}	Gate-Source Voltage-Continuous	±30	V
I_D	Drain Current-Continuous	20	A
I_{DM}	Drain Current-Single Pluse	84	A
P_D	Total Dissipation @T_C=25℃	188	W
T_J	Max. Operating Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55~150	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance, Junction to Case	0.66	℃/W



DIM	mm MIN	MAX
A	4.40	4.60
B	9.91	10.25
C	2.65	2.95
D	12.65	12.95
F	3.40	3.80
G	12.9	13.4
H	1.17	1.37
J	0.71	0.91
K	2.54	
L	4.98	5.18
Q	2.85	3.25
R	8.95	9.75
S	1.20	1.40
U	2.25	2.55
V	0.33	0.65

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYPE	MAX	UNIT
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	V_{GS}= 0; I_D= 250 μ A	600			V
$V_{GS(th)}$	Gate Threshold Voltage	V_{DS}= V_{GS}; I_D= 250 μ A	3	3.5	4	V
$R_{DS(on)}$	Drain-Source On-Resistance	V_{GS}= 10V; I_D= 10A		150	180	mΩ
I_{GSS}	Gate-Body Leakage Current	V_{GS}= ±20V;V_{DS}= 0			±100	nA
I_{DSS}	Zero Gate Voltage Drain Current	V_{DS}= 600V; V_{GS}= 0 V_{DS}= 600V; V_{GS}= 0; T_j= 125℃			1 100	μ A
V_{SD}	Forward On-Voltage	I_S= 20A; V_{GS}=0			1.2	V
trr	Reverse Recovery Time	T_j=25°C,I_F=20A,di/dt=100A/μs		310		ns