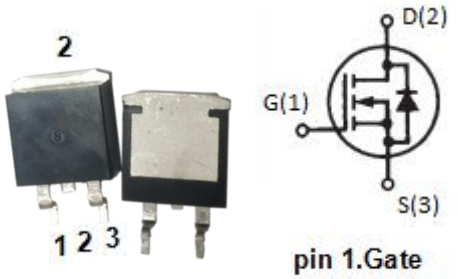
isc N-Channel MOSFET Transistor RCJ120N20

DESCRIPTION

- Drain Source Voltage- : V_{DSS}=200V(Min)
- Fast Switching Speed
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



D²PAK

pin 1.Gate
2.Drain
3.Source
TO-263 package

APPLICATIONS

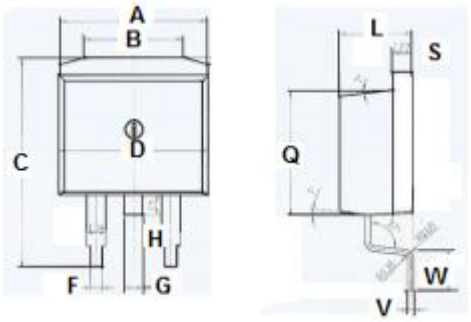
- Switch Mode Power Supply (SMPS)
- Uninterruptible Power Supply (UPS)

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	ARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage (V_{GS}=0)	200	V
V_{GS}	Gate-Source Voltage	±30	V
I_D	Drain Current-continuous@ T_C=25℃	12	A
P_{tot}	Total Dissipation@T_C=25℃	52	W
E_{AS}*	Repetitive avalanche energy	11.6	mJ
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	2.36	℃/W



DIM	mm	
	MIN	MAX
A	9.8	10.2
B	6.6	6.8
C	15.1	15.3
D	9.6	10
F	0.7	0.9
G	1.26	1.3
H	1.2	1.45
L	4.4	4.6
Q	9.2	9.3
S	1.25	1.35
V	0.4	0.6
W	2.6	2.8

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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= 250uA	200			V
$V_{GS(TH)}$	Gate Threshold Voltage	V_{DS}=V_{GS},I_D= 250uA	2		4	V
$R_{DS(ON)}$	Drain-Source On-stage Resistance	V_{GS}= 10V; I_D=6A			325	mΩ
I_{GSS}	Gate Source Leakage Current	V_{GS}= ±30V; V_{DS}= 0			±100	nA
I_{DSS}	Zero Gate Voltage Drain Current	V_{DS}=200V; V_{GS}= 0			10	μA