

isc N-Channel MOSFET Transistor

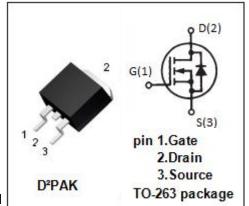
RCJ450N20

FEATURES

- Drain Current –I_D= 45A@ T_C=25 $^\circ\!\mathrm{C}$
- Drain Source Voltage-: V_{DSS}=200V(Min)
- Static Drain-Source On-Resistance
- : $R_{DS(on)}$ = 55m Ω (Max)
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

DESCRIPTION

• Designed for use in switch mode power supplies and general purpose applications.



	mm		I
DIM	MIN	MAX	1
A	1	0	1
В	6.6	6.8	
С	15.23	15.25	1
D	10.15	10.17	1
F	0.76	0.78	
G	1.26	1.28	
Н	1.4	1.6	
J	1.33	1.35	1
Κ	0.4	0.6	
L	4.6	4.8	
0	8.69	8.71	
R	5.28	5.30	
S	1.26	1.28	1
U	0.0	0.2	1
v	0.37	0.39	
W	2.80	2.82	1

ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{DSS}	Drain-Source Voltage	200	V
V _{GS}	Gate-Source Voltage-Continuous	±30	V
ID	Drain Current-Continuous 45		A
I _{DM}	Drain Current-Single Pluse	180	A
P _D	Total Dissipation @T _c =25℃	211	W
TJ	Max. Operating Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55~150	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	0.59	°C/W



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ELECTRICAL CHARACTERISTICS

$T_c=25^{\circ}C$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	МАХ	UNIT
V _{(BR)DSS}	Drain-Source Breakdown Voltage	V _{GS} = 0; I _D = 1mA	200		V
V _{GS} (th)	Gate Threshold Voltage	V _{DS} = V _{GS} ; I _D =1mA	3	5	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = 10V; I _D = 22.5A		55	$\mathbf{m}\Omega$
I _{GSS}	Gate-Body Leakage Current	V _{GS} = ±30V;V _{DS} = 0		±100	nA
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} = 200V; V _{GS} = 0		1	μA
V _{SD}	Forward On-Voltage	I _S = 45A; V _{GS} = 0		1.5	V

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