

isc N-Channel MOSFET Transistor

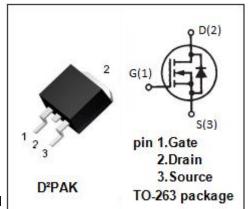
RCJ220N25

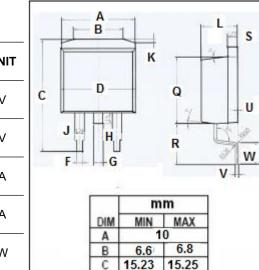
FEATURES

- Drain Current –I_D= 22A@ T_C=25 $^\circ\!\mathrm{C}$
- Drain Source Voltage-: V_{DSS}=250V(Min)
- Static Drain-Source On-Resistance
- : $R_{DS(on)}$ = 140m 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.





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F

Н

1

K

Q

R

s

U

v

W

10.15 10.17

0.78

1.6

1.35

4.8

8.71

5.30

1.28

0.2

0.39

2.82

0.6

0.76

1.26

1.4

1.33

0.4

4.6

8.69

5.28

1.26

0.0

0.37

2.80

SYMBOL	PARAMETER	VALUE	UNIT	
V _{DSS}	Drain-Source Voltage 250			
V_{GS}	Gate-Source Voltage-Continuous ±30			
I _D	Drain Current-Continuous 22		A	
I _{DM}	Drain Current-Single Pluse 80		A	
P _D	Total Dissipation @Tc=25°C 166		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	0.75	°C/W

¹ isc & iscsemi is registered trademark



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ELECTRICAL CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V _{(BR)DSS}	Drain-Source Breakdown Voltage	V _{GS} = 0; I _D = 1mA	250		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 = 11A V _{GS} = 10V; I _D = 11A@T _J =125℃		140 320	mΩ
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		25	μA
V _{SD}	Forward On-Voltage	I _S = 22A; V _{GS} = 0		1.5	V

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