

isc N-Channel MOSFET Transistor

RD3S100CN

pin 1.Gate

2.Drain

FEATURES

- Drain Current –I_D= 10A@ T_C=25 $^\circ\!\!\mathrm{C}$
- Drain Source Voltage-: V_{DSS}= 190V(Min)
- Static Drain-Source On-Resistance
- : R_{DS(on)} = 182m 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.

ABSOLUTE MAXIMUM RATINGS(Ta=25 C)					
SYMBOL	PARAMETER	VALUE	UNIT		
V _{DSS}	Drain-Source Voltage	190	V		
V _{GS}	Gate-Source Voltage-Continuous	±20	V		
ID	Drain Current-Continuous 10		А		
I _{DM}	Drain Current-Single Pluse	40	A		
P _D	Total Dissipation @T _c =25℃	85	W		
TJ	Max. Operating Junction Temperature	150	°C		
T _{stg}	Storage Temperature	-55~150	°C		

ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

DPAK 3. Source TO-252 package

	mm	
DIM	MIN	MAX
Α	6.40	6.60
В	5.20	5.40
С	1.15	1.35
D	5.70	6.10
F	0.65	
G	0.75	
Н	2.10	2.50
J	2.10	2.40
κ	0.40	0.60
L	0.90	1.10
Q	9.90	10.1

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	1.46	°C/W

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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	190		V
V _{GS} (th)	Gate Threshold Voltage	V _{DS} = V _{GS} ; I _D = 1mA	0.5	2.5	V
$R_{\text{DS(on)}}$	Drain-Source On-Resistance	V _{GS} = 10V; I _D = 5A		182	mΩ
I _{GSS}	Gate-Body Leakage Current	V _{GS} = ±20V;V _{DS} = 0		±100	nA
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} = 190V; V _{GS} = 0		10	μA
V _{SD}	Forward On-Voltage	I _S = 10A; V _{GS} = 0		1.5	V

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