

INCHANGE SEMICONDUCTOR

Isc N-Channel MOSFET Transistor

IRF540NS

• FEATURES

- With To-263(D2PAK) package
- · Low input capacitance and gate charge
- · Low gate input resistance
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

Switching applications

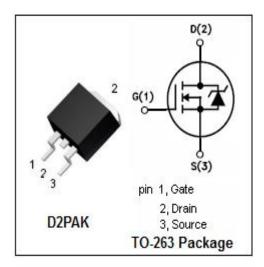
• ABSOLUTE MAXIMUM RATINGS(Ta=25°C)								
SYMBOL	PARAMETER	VALUE	UNIT					
V _{DSS}	Drain-Source Voltage	100	V					
V _{GSS}	Gate-Source Voltage	±20	∧v					
ID	Drain Current-ContinuousTc=25℃ Tc=100℃	33 23	A					
I _{DM}	Drain Current-Single Pulsed	110	А					
PD	Total Dissipation @T _C =25°C	130	W					
T _{ch}	Max. Operating Junction Temperature	175	°C					
T _{stg}	Storage Temperature	-55~175	°C					

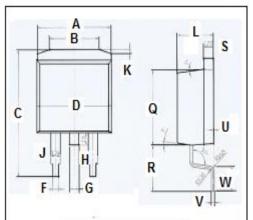
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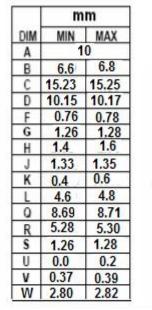
THERMAL CHARACTERISTICS

SYMBOL	PARAMETER		UNIT	
Rth(ch-c)	Channel-to-case thermal resistance		°C/W	
Rth(ch-a)	Rth(ch-a) Channel-to-ambient thermal resistance		°C/W	

1







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ELECTRICAL CHARACTERISTICS

 $T_{\text{C}}\text{=}25^\circ\!\!\mathbb{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	ТҮР	МАХ	UNIT
BV _{DSS}	Drain-Source Breakdown Voltage	V _{GS} =0V; I _D = 0.25mA	100			v
V _{GS} (th)	Gate Threshold Voltage	V _{DS} =V _{GS} ; I _D =0.25mA	2.0		4.0	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = 10V; I _D =16A			44	mΩ
I _{GSS}	Gate-Source Leakage Current	V _{GS} = ±20V;V _{DS} = 0V			±0.1	μA
I _{DSS}	Drain-Source Leakage Current	V _{DS} =100V; V _{GS} = 0V;Tj=25°C V _{DS} =80V; V _{GS} = 0V;Tj=125°C			25 250	μA
V _{SDF}	Diode forward voltage	I _{SD} =16A, V _{GS} = 0 V			1.2	V

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2