

isc N-Channel MOSFET Transistor

IPB041N04N

• FEATURES

- With TO-263(D2PAK) packaging
- · High speed switching
- · Low gate input resistance
- · Standard level gate drive
- · Easy to use
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



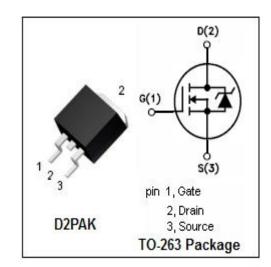
- Power supply
- · Switching applications

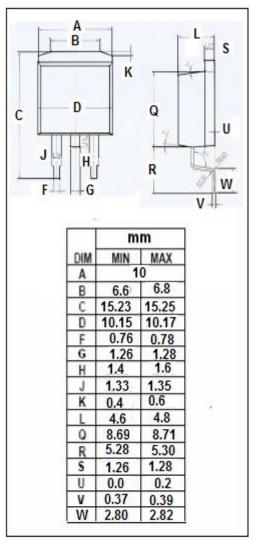


SYMBOL	PARAMETER	VALUE	UNIT	
V _{DSS}	Drain-Source Voltage	40	V	
V_{GSS}	Gate-Source Voltage	±20	V	
I _D	Drain Current-Continuous;Tc=25℃ Tc=100℃	80	А	
I _{DM}	Drain Current-Single Pulsed	400	А	
P _D	Total Dissipation	94	W	
Tj	Operating Junction Temperature	175	${\mathbb C}$	
T _{stg}	Storage Temperature	-55~175	${\mathbb C}$	

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER		UNIT	
Rth(ch-c)	Channel-to-case thermal resistance	1.6	°C/W	
Rth(ch-a)	Rth(ch-a) Channel-to-ambient thermal resistance		°C/W	





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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	ТҮР	MAX	UNIT
BV _{DSS}	Drain-Source Breakdown Voltage	V _{GS} =0V; I _D =1mA	40			V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} =V _{GS} ; I _D =0.045mA	2.0		4.0	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = 10V; I _D =80A		3.3	4.1	mΩ
I _{GSS}	Gate-Source Leakage Current	V _{GS} =±20V;V _{DS} = 0V			±0.1	μА
I _{DSS}	Drain-Source Leakage Current	V _{DS} =40V; V _{GS} = 0V;Tc=25°C V _{DS} =40V; V _{GS} = 0V; Tc=125°C			1 100	μА
V _{SDF}	Diode forward voltage	I _{SD} =80A, V _{GS} = 0 V		0.96	1.2	V

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