

# isc N-Channel MOSFET Transistor

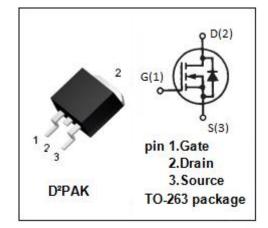
# IXTA230N04T4

### FEATURES

- · With TO-220F 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

### APPLICATIONS

- Power supply
- Switching applications

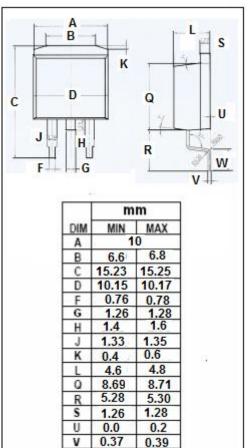


## • ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT	
V <sub>DSS</sub>	Drain-Source Voltage	40	V	
V <sub>GSS</sub>	Gate-Source Voltage	±15	V	
I <sub>D</sub>	Drain Current-Continuous@Tc=25℃ Tc=100℃	230 160	А	
Ірм	Drain Current-Single Pulsed	700	А	
P <sub>D</sub>	Total Dissipation	40	W	
Tj	Operating Junction Temperature	175	$^{\circ}$	
T <sub>stg</sub>	Storage Temperature	-55~175	${\mathbb C}$	

### • THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT	
Rth(ch-c)	Channel-to-case thermal resistance	3.75	°C/W	



W 2.80



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#### **ELECTRICAL CHARACTERISTICS**

Tc=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	ТҮР	MAX	UNIT
BV <sub>DSS</sub>	Drain-Source Breakdown Voltage	V <sub>GS</sub> =0V; I <sub>D</sub> = 0.25mA	40			V
V <sub>GS(th)</sub>	Gate Threshold Voltage	V <sub>DS</sub> =5V; I <sub>D</sub> =0.25mA	2.0		4.0	V
R <sub>DS(on)</sub>	Drain-Source On-Resistance	V <sub>GS</sub> = 10V; I <sub>D</sub> =110A			2.9	mΩ
I <sub>GSS</sub>	Gate-Source Leakage Current	V <sub>GS</sub> =±15V;V <sub>DS</sub> = 0V			±0.2	μА
I <sub>DSS</sub>	Drain-Source Leakage Current	V <sub>DS</sub> = 40V; V <sub>GS</sub> = 0V;			5	μА
V <sub>SDF</sub>	Diode forward voltage	I <sub>SD</sub> =100A, V <sub>GS</sub> = 0 V			1.4	V

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