

# isc N-Channel MOSFET Transistor

# FQPF10N20C

### • FEATURES

- · With low gate drive requirements
- · Easy to drive
- · 100% avalanche tested
- · Minimum Lot-to-Lot variations for robust device performance and reliable operation



### APPLICATIONS

· Switching applications

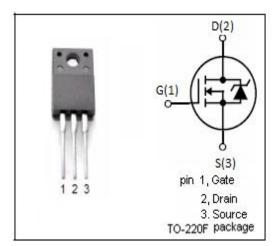


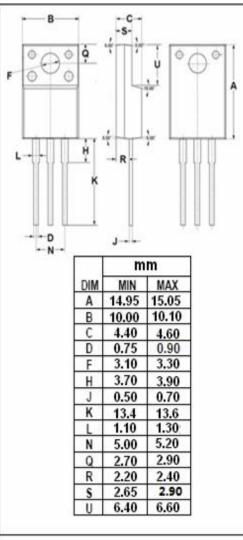
## • ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT	
V <sub>DSS</sub>	Drain-Source Voltage	200	V	
V <sub>GSS</sub>	Gate-Source Voltage	±30	V	
I <sub>D</sub>	Drain Current-Continuous@Tc=25℃ Tc=100℃	9.5 6.0	А	
I <sub>DM</sub>	Drain Current-Single Pulsed	38	А	
P <sub>D</sub>	Total Dissipation	38	W	
Tj	Operating Junction Temperature	-55~150	${\mathbb C}$	
T <sub>stg</sub>	Storage Temperature	-55~150	${\mathbb C}$	

## THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
Rth(ch-c)	Channel-to-case thermal resistance	3.33	°C/W







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### **ELECTRICAL CHARACTERISTICS**

T<sub>C</sub>=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
BV <sub>DSS</sub>	Drain-Source Breakdown Voltage	V <sub>GS</sub> =0V; I <sub>D</sub> = 0.25mA	200			V
V <sub>GS(th)</sub>	Gate Threshold Voltage	V <sub>DS</sub> =±30V; 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> =4.75A		0.29	0.36	Ω
I <sub>GSS</sub>	Gate-Source Leakage Current	V <sub>GS</sub> = ±30V;V <sub>DS</sub> = 0V			±0.1	μ <b>А</b>
I <sub>DSS</sub>	Drain-Source Leakage Current	V <sub>DS</sub> = 200V; V <sub>GS</sub> = 0V;@Tc=25°C V <sub>DS</sub> = 160V; V <sub>GS</sub> = 0V Tc=125°C			10 100	μ <b>А</b>
V <sub>SDF</sub>	Diode forward voltage	I <sub>SD</sub> =9.5A, V <sub>GS</sub> = 0 V			1.5	V

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