

# isc N-Channel MOSFET Transistor

## FCP11N60N

#### FEATURES

- · With TO-220 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

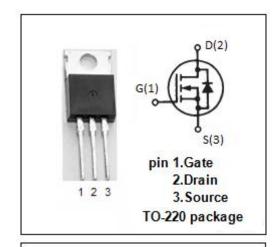


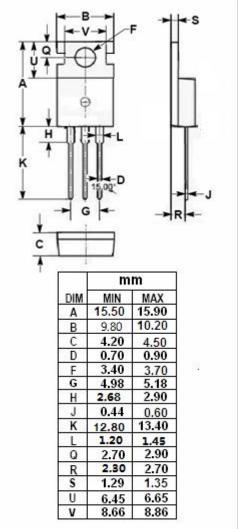
### • ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>DSS</sub>	Drain-Source Voltage	600	V
$V_{GSS}$	Gate-Source Voltage	±30	V
I <sub>D</sub>	Drain Current-Continuous;@Tc=25℃ Tc=100℃	10.8 6.8	Α
I <sub>DM</sub>	Drain Current-Single Pulsed	32.4	А
P <sub>D</sub>	Total Dissipation	94	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	1.33	°C/W





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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> = 1mA	600			V
V <sub>GS(th)</sub>	Gate Threshold Voltage	V <sub>DS</sub> =V <sub>GS</sub> ; I <sub>D</sub> =250uA	2		4	V
R <sub>DS(on)</sub>	Drain-Source On-Resistance	V <sub>GS</sub> = 10V; I <sub>D</sub> = 5.4A			299	mΩ
I <sub>GSS</sub>	Gate-Source Leakage Current	$V_{GS}$ = $\pm 30V; V_{DS}$ = $0V$			±100	nA
I <sub>DSS</sub>	Drain-Source Leakage Current	V <sub>DS</sub> = 480V; V <sub>GS</sub> = 0V V <sub>DS</sub> = 480V; V <sub>GS</sub> = 0V; T <sub>J</sub> =125℃			10 100	μА
V <sub>SDF</sub>	Diode forward voltage	I <sub>SD</sub> = 54A, V <sub>GS</sub> = 0 V			1.2	V

#### **NOTICE:**

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