

# isc N-Channel MOSFET Transistor

# FCH070N60E

#### FEATURES

- · With TO-247 packaging
- · Drain Source Voltage-
  - : V<sub>DSS</sub> ≥ 600V
- Static drain-source on-resistance:
  R<sub>DS</sub>(on) ≤ 70mΩ@V<sub>GS</sub>=10V
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

### APPLICATIONS

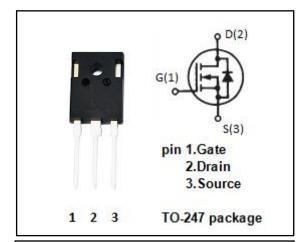
- Power supply
- · Switching applications

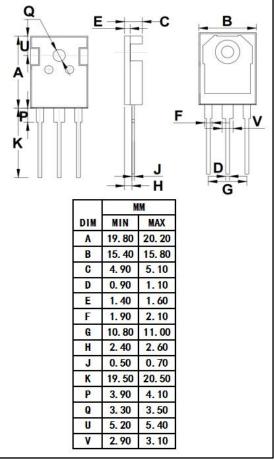
## • ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>DSS</sub>	Drain-Source Voltage	600	V
V <sub>GSS</sub>	ate-Source Voltage ±20		V
I <sub>D</sub>	Drain Current-Continuous;@Tc=25℃	52	А
I <sub>DM</sub>	Drain Current-Single Pulsed	156	Α
P <sub>D</sub>	Total Dissipation	481	W
Tj	Operating Junction Temperature -55~150		$^{\circ}$
T <sub>stg</sub>	Storage Temperature	-55~150	℃

### • THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
Rth(ch-c)	Channel-to-case thermal resistance	0.26	°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> = 250uA	600			V
$V_{\text{GS(th)}}$	Gate Threshold Voltage	V <sub>DS</sub> =V <sub>GS</sub> ; I <sub>D</sub> =250uA	2.5		3.5	V
R <sub>DS(on)</sub>	Drain-Source On-Resistance	V <sub>GS</sub> = 10V; I <sub>D</sub> = 26A			70	<b>m</b> Ω
I <sub>GSS</sub>	Gate-Source Leakage Current	V <sub>GS</sub> =±20V;V <sub>DS</sub> = 0V			±100	nA
I <sub>DSS</sub>	Drain-Source Leakage Current	V <sub>DS</sub> = 600V; V <sub>GS</sub> = 0V			1	μ <b>А</b>
V <sub>SDF</sub>	Diode forward voltage	I <sub>SD</sub> = 26A, V <sub>GS</sub> = 0 V			1.2	٧

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