

# isc N-Channel MOSFET Transistor

## **FDP3672**

#### • FEATURES

- · With TO-220 packaging
- Drain Source Voltage-
  - : V<sub>DSS</sub> ≥ 105V
- Static drain-source on-resistance:
  R<sub>DS</sub>(on) ≤ 33mΩ@V<sub>GS</sub>=10V
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

### APPLICATIONS

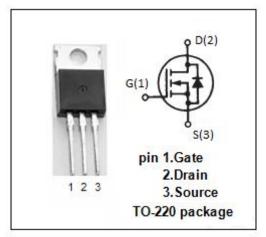
- Power supply
- · Switching applications

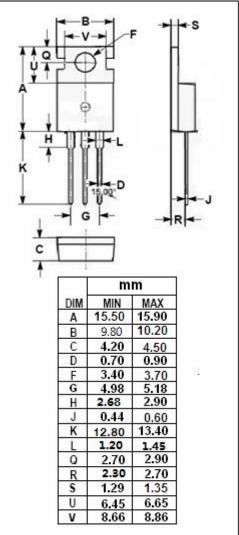
### • ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>DSS</sub>	Drain-Source Voltage	105	V
V <sub>GSS</sub>	Gate-Source Voltage	±20	V
I <sub>D</sub>	Drain Current-Continuous;@Tc=25℃	41	А
P <sub>D</sub>	Total Dissipation	135	W
T <sub>j</sub>	Operating Junction Temperature	on Temperature -55~175	
T <sub>stg</sub>	Storage Temperature	-55~175	$^{\circ}$

### • THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
Rth(ch-c)	Channel-to-case thermal resistance	1.11	°C/W







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#### **ELECTRICAL CHARACTERISTICS**

Tc=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> = 250uA	105			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> = 41A			33	mΩ
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> = 80V; V <sub>GS</sub> = 0V V <sub>DS</sub> = 80V; V <sub>GS</sub> = 0V;T <sub>J</sub> =150°C			1 250	μА
V <sub>SDF</sub>	Diode forward voltage	I <sub>SD</sub> = 41A, V <sub>GS</sub> = 0 V			1.25	V

#### **NOTICE:**

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