

## **INCHANGE SEMICONDUCTOR**

# isc N-Channel MOSFET Transistor

# 70N06

#### DESCRIPTION

- Drain Current  $I_D$ =70A@ T<sub>C</sub>=25°C
- Drain Source Voltage-
- : V<sub>DSS</sub>=60V(Min)
- Static Drain-Source On-Resistance
- : R<sub>DS(on)</sub> = 14m Ω (Max)
- Fast Switching Speed
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

### APPLICATIONS

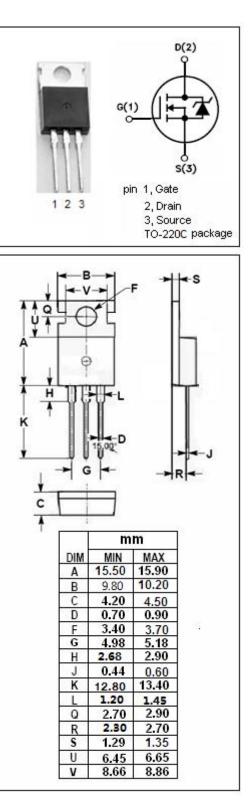
• Designed for use in applications such as swithing Regulators, switching convertes, motor drivers and Relay drivers.

## ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	ARAMETER	VALUE	UNIT
V <sub>DSS</sub>	Drain-Source Voltage (V <sub>GS</sub> =0)	60	V
V <sub>GS</sub>	Gate-Source Voltage	±20	V
ID	Drain Current-continuous@ TC=25°C 70		А
PD	Power Dissipation @TC=25°C 150		W
Tj	Max. Operating Junction Temperature	-55~150	°C
T <sub>stg</sub>	Storage Temperature Range	-55~150	°C

#### THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	МАХ	UNIT
Rth j-c	Thermal Resistance, Junction to Case	0.83	°C/W





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• ELECTRI	ELECTRICAL CHARACTERISTICS (TC=25 C)								
SYMBOL	PARAMETER	CONDITIONS	MIN	МАХ	UNIT				
V <sub>(BR)DSS</sub>	Drain-Source Breakdown Voltage	V <sub>GS</sub> = 0; I <sub>D</sub> = 0.25mA	60		V				
$V_{\text{GS(TH)}}$	Gate Threshold Voltage	V <sub>DS</sub> = V <sub>GS</sub> ; I <sub>D</sub> = 0.25mA	2	4	V				
R <sub>DS(ON)</sub>	Drain-Source On-stage Resistance	V <sub>GS</sub> = 10V; I <sub>D</sub> = 70A		0.014	Ω				
I <sub>GSS</sub>	Gate Source Leakage Current	V <sub>GS</sub> = ±20V;V <sub>DS</sub> = 0		±100	nA				
IDSS	Zero Gate Voltage Drain Current	V <sub>DS</sub> = 60V; V <sub>GS</sub> = 0		1	uA				
V <sub>SD</sub>	Diode Forward Voltage	I <sub>F</sub> = 70A; V <sub>GS</sub> = 0		1.5	V				

### • ELECTRICAL CHARACTERISTICS (Tc=25°C)

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