

## INCHANGE SEMICONDUCTOR

# isc N-Channel MOSFET Transistor

# IXFP34N65X2

## • 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

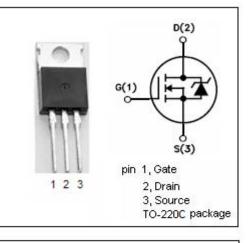
• ABSOLUTE MAXIMUM RATINGS(Ta=25 C)							
SYMBOL	PARAMETER	VALUE	UNIT				
V <sub>DSS</sub>	Drain-Source Voltage	650	V				
V <sub>GSS</sub>	Gate-Source Voltage ±30		V				
ID	Drain Current-Continuous 34		A				
I <sub>DM</sub>	Drain Current-Single Pulsed	68	A				
PD	Total Dissipation	540	W				
Tj	Operating Junction Temperature	-55~150	°C				
T <sub>stg</sub>	Storage Temperature	-55~150	°C				

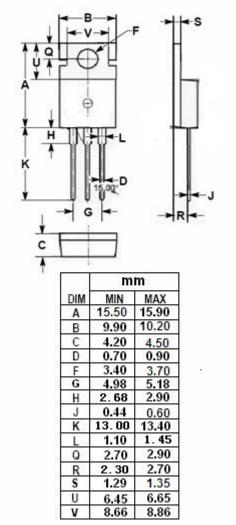
### • ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

#### • THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	МАХ	UNIT
Rth(ch-c)	Channel-to-case thermal resistance	0.23	°C/W

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### **ELECTRICAL CHARACTERISTICS**

#### $T_{C}\text{=}25^{\circ}\!\!\!\mathrm{C}$ 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	650			V
V <sub>GS</sub> (th)	Gate Threshold Voltage	V <sub>DS</sub> =±30V; I <sub>D</sub> =0.25mA	3.5		5.0	V
R <sub>DS(on)</sub>	Drain-Source On-Resistance	V <sub>GS</sub> = 10V; I <sub>D</sub> =17A			100	mΩ
I <sub>GSS</sub>	Gate-Source Leakage Current	$V_{GS}$ = ±30V; $V_{DS}$ = 0V			±0.1	μA
I <sub>DSS</sub>	Drain-Source Leakage Current	V <sub>DS</sub> = 650V; V <sub>GS</sub> = 0V;@Tc=25℃ Tc=125℃			10 1750	μA
V <sub>SDF</sub>	Diode forward voltage	I <sub>SD</sub> =34A, V <sub>GS</sub> = 0 V			1.4	V

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