

# isc N-Channel MOSFET Transistor

# IRFS4227, IIRFS4227

### FEATURES

- Static drain-source on-resistance:
  R<sub>DS</sub>(on)≤22mΩ
- Enhancement mode:
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

### DESCRITION

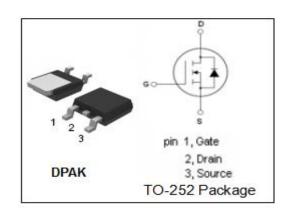
· Fast switching

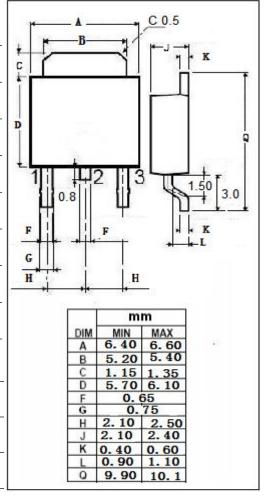
## • ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

ADOUGH MACHINOM TOTAL 2007							
SYMBOL	PARAMETER	VALUE	UNIT				
$V_{ extsf{DSS}}$	Drain-Source Voltage	200	V				
V <sub>GS</sub>	Gate-Source Voltage	±30	V				
ID	Drain Current-Continuous	62	А				
I <sub>DM</sub>	Drain Current-Single Pulsed	260	А				
P <sub>D</sub>	Total Dissipation @T <sub>C</sub> =25°C	330	W				
Tj	Max. Operating Junction Temperature 175		$^{\circ}$				
T <sub>stg</sub>	Storage Temperature -40~17		$^{\circ}$				

## • THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
Rth(j-c)	Channel-to-case thermal resistance	0.45	°C/W
Rth(j-a)	Rth(j-a) Channel-to-ambient thermal resistance		°C/W







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## **ELECTRICAL CHARACTERISTICS**

T<sub>C</sub>=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> =250 μ A	200			V
V <sub>GS(th)</sub>	Gate Threshold Voltage	V <sub>DS</sub> =V <sub>GS</sub> ; I <sub>D</sub> =250 μ A	3		5	V
R <sub>DS(on)</sub>	Drain-Source On-Resistance	V <sub>GS</sub> =10V; I <sub>D</sub> =46A			22	mΩ
I <sub>GSS</sub>	Gate-Source Leakage Current	V <sub>GS</sub> = ±20V			±0.1	μА
I <sub>DSS</sub>	Drain-Source Leakage Current	V <sub>DS</sub> =200V; V <sub>GS</sub> = 0V			20	μА
V <sub>SD</sub>	Diode forward voltage	I <sub>s</sub> =46A, V <sub>GS</sub> = 0V			1.3	V

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