

## isc N-Channel MOSFET Transistor

# IRLS3034PBF

#### • FEATURES

- With TO-263( D2PAK ) packaging
- · High speed switching
- · Low gate input resistance
- · Standard level gate drive
- · Easy to use
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



#### APPLICATIONS

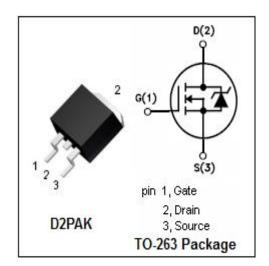
- Power supply
- Switching applications

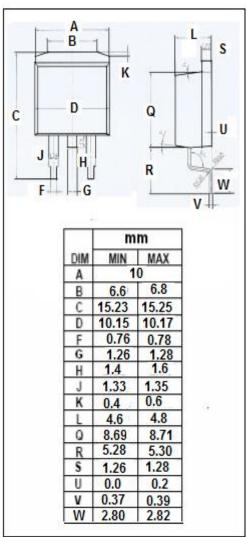
### • ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT	
V <sub>DSS</sub>	Drain-Source Voltage	40	V	
V <sub>G</sub> s	Gate-Source Voltage	±20	V	
I <sub>D</sub>	Drain Current-Continuous	195	А	
P <sub>D</sub>	Total Dissipation @T <sub>C</sub> =25℃	375	W	
Tj	Max. Operating Junction Temperature -55~175		$^{\circ}$ C	
T <sub>stg</sub>	Storage Temperature	-55~175	$^{\circ}$	

### • THERMAL CHARACTERISTICS

SYMBOL	PARAMETER MAX		UNIT	
Rth(j-c)	Channel-to-case thermal resistance	0.4	°C/W	







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### **ELECTRICAL CHARACTERISTICS**

T<sub>C</sub>=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> = 250 μ A	40			V
V <sub>GS(th)</sub>	Gate Threshold Voltage	V <sub>DS</sub> =V <sub>GS</sub> ; I <sub>D</sub> = 250 μ A	1		2.5	V
R <sub>DS(on)</sub>	Drain-Source On-Resistance	V <sub>GS</sub> = 10V; I <sub>D</sub> =195A		1.4	1.7	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> = 40V; V <sub>GS</sub> = 0V			20	μА
V <sub>SD</sub>	Diode forward voltage	I <sub>S</sub> = 195A, V <sub>GS</sub> = 0V			1.3	V



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