

## INCHANGE SEMICONDUCTOR

# isc N-Channel MOSFET Transistor

## STW26NM50

#### • FEATURES

- With TO-247 packaging
- · With low gate drive requirements
- · Easy to drive
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



Switching applications

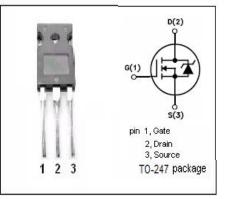
• ABSOLUTE MAXIMUM RATINGS(Ta=25 C)								
SYMBOL	PARAMETER	VALUE	UNIT					
V <sub>DSS</sub>	Drain-Source Voltage	500	V					
V <sub>GSS</sub>	Gate-Source Voltage	±30	∧v					
ID	Drain Current-Continuous @Tc=25℃ Tc=100℃	30 18.9	A					
I <sub>DM</sub>	Drain Current-Single Pulsed	120	А					
P <sub>D</sub>	Total Dissipation	313	W					
Tj	Operating Junction Temperature	-55~150	°C					
T <sub>stg</sub>	Storage Temperature	-55~150	°C					

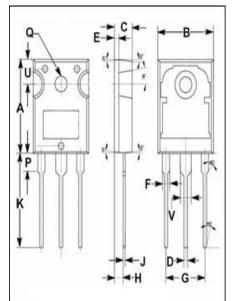
## • ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

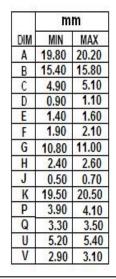
#### • THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	МАХ	UNIT
Rth(ch-c)	Channel-to-case thermal resistance	2.5	°C/W

1







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### **ELECTRICAL CHARACTERISTICS**

 $T_c=25^{\circ}C$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	ТҮР	МАХ	UNIT
BV <sub>DSS</sub>	Drain-Source Breakdown Voltage	V <sub>GS</sub> =0V; I <sub>D</sub> = 0.25mA	500			V
V <sub>GS</sub> (th)	Gate Threshold Voltage	V <sub>DS</sub> =V <sub>GS</sub> ; I <sub>D</sub> =0.25mA	3.0		5.0	V
R <sub>DS(on)</sub>	Drain-Source On-Resistance	V <sub>GS</sub> = 10V; I <sub>D</sub> =13A		0.1	0.12	Ω
I <sub>GSS</sub>	Gate-Source Leakage Current	V <sub>GS</sub> = ±20V;V <sub>DS</sub> = 0V			±10	μA
I <sub>DSS</sub>	Drain-Source Leakage Current	V <sub>DS</sub> = 500V; V <sub>GS</sub> = 0V;@Tc=25°C V <sub>DS</sub> = 500V; V <sub>GS</sub> = 0V;Tc=125°C			10 100	μA
VSDF	Diode forward voltage	I <sub>SD</sub> =26A, V <sub>GS</sub> = 0 V			1.5	V



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2