

# isc N-Channel Mosfet Transistor

## STW19NM60N

### • FEATURES

- Drain Current I<sub>D</sub>= 13A@ T<sub>C</sub>=25 °C
- · Drain Source Voltage-
  - : V<sub>DSS</sub>= 600V(Min)
- · Fast Switching Speed
- · 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

### APPLICATIONS

Switching applications

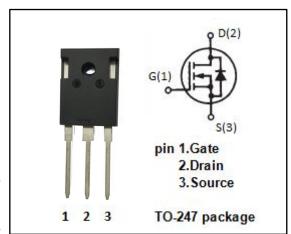


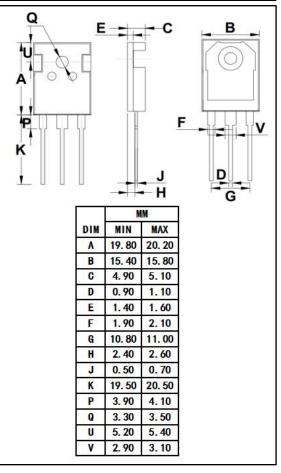
## • ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>DSS</sub>	Drain-Source Voltage	600	V
V <sub>GS</sub>	Gate-Source Voltage	±25	٧
I <sub>D</sub>	Drain Current-continuous@ T <sub>C</sub> =25℃	13	А
I <sub>DM</sub>	Pulse Drain Current	52	А
P <sub>tot</sub>	Total Dissipation@T <sub>C</sub> =25°C		W
Tj	Max. Operating Junction Temperature	150	$^{\circ}$
$T_{stg}$	Storage Temperature Range	-55~150	$^{\circ}$

### • THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	1.14	°C/W







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#### **ELECTRICAL CHARACTERISTICS**

Tc=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYPE	MAX	UNIT
V <sub>(BR)DSS</sub>	Drain-Source Breakdown Voltage	V <sub>GS</sub> = 0; I <sub>D</sub> = 1mA	600			V
V <sub>GS(th)</sub>	Gate Threshold Voltage	V <sub>DS</sub> = V <sub>GS</sub> ; I <sub>D</sub> =250μA	2		4	V
R <sub>DS(on)</sub>	Drain-Source On-Resistance	V <sub>GS</sub> = 10V; I <sub>D</sub> = 6.5A			285	mΩ
I <sub>GSS</sub>	Gate-Body Leakage Current	V <sub>GS</sub> = ±25V;V <sub>DS</sub> = 0			±100	nA
I <sub>DSS</sub>	Zero Gate Voltage Drain Current	V <sub>DS</sub> = Max rating			1	μΑ
		V <sub>DS</sub> = Max rating; T <sub>C</sub> =125℃			10	
V <sub>SD</sub>	Diode Forward On-Voltage	I <sub>S</sub> = 13A;V <sub>GS</sub> = 0			1.6	V



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