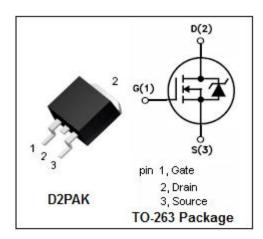


# isc N-Channel MOSFET Transistor

# STB15NM60ND

#### **DESCRIPTION**

- Drain Current: I<sub>D</sub>=14A@ T<sub>C</sub>=25℃
- Drain Source Voltage:
  - : V<sub>DSS</sub>= 600V(Min)
- · 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

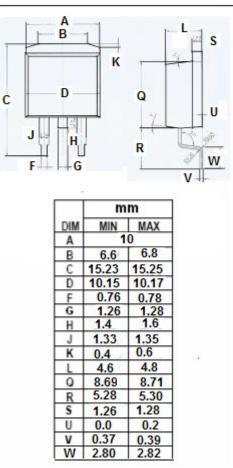


### **APPLICATIONS**

· Power switching application

### ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	ARAMETER	VALUE	UNIT				
$V_{DSS}$	Drain-Source Voltage (V <sub>GS</sub> =0)	600	V				
$V_{GS}$	Gate-Source Voltage	±20	V				
I <sub>D</sub>	Drain Current-continuous@ TC=25℃	14	Α				
P <sub>tot</sub>	Total Dissipation@TC=25°C	125	W				
Tj	Max. Operating Junction Temperature	150	$^{\circ}$				
T <sub>stg</sub>	Storage Temperature Range -55~150		$^{\circ}$				
THERMAL CHARACTERISTICS							
SYMBOL	PARAMETER	MAX	UNIT				
R <sub>th j-c</sub>	Thermal Resistance,Junction to Case	1	°C/W				





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### • ELECTRICAL CHARACTERISTICS (T<sub>C</sub>=25°C)

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)DSS}$	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> =0.25mA	3		5	V
R <sub>DS(on)</sub>	Drain-Source On-stage Resistance	V <sub>GS</sub> =10V; I <sub>D</sub> = 7A			0.299	mΩ
I <sub>GSS</sub>	Gate Source Leakage Current	V <sub>GS</sub> = ±20V;V <sub>DS</sub> = 0			±100	nA
I <sub>DSS</sub>	Zero Gate Voltage Drain Current	V <sub>DS</sub> =600V; V <sub>GS</sub> = 0			1	μΑ
		V <sub>DS</sub> =600V; V <sub>GS</sub> = 0;T <sub>C</sub> = 125°C			100	
V <sub>SD</sub>	Forward On-Voltage	I <sub>S</sub> = 14A; V <sub>GS</sub> =0			1.3	V

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