

# isc N-Channel MOSFET Transistor

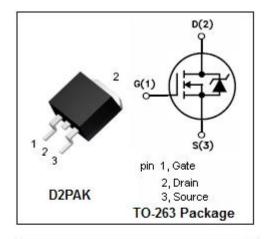
# IPB080N03L

#### DESCRIPTION

- Drain Current :I<sub>D</sub>= 50A@ T<sub>C</sub>=25°C
- Drain Source Voltage
  - : V<sub>DSS</sub>= 30V(Min)
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

#### APPLICATIONS

 Designed for high current, high speed switching, switch mode power supplies.

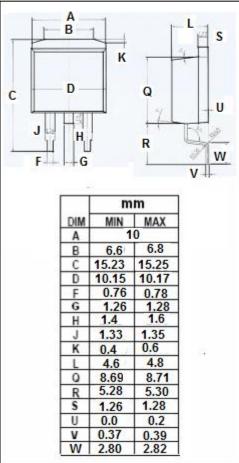


#### ABSOLUTE MAXIMUM RATINGS(T<sub>C</sub>=25°C)

SYMBOL	ARAMETER	VALUE	UNIT
V <sub>DSS</sub>	Drain-Source Voltage (V <sub>GS</sub> =0)	30	V
V <sub>GS</sub>	Gate-Source Voltage	±20	V
I <sub>D</sub>	Drain Current-continuous	50	А
I <sub>D(puls)</sub>	Pulse Drain Current	350	А
P <sub>tot</sub>	Total Dissipation	47	W
T <sub>j</sub>	Max. Operating Junction Temperature 17		$^{\circ}$ C
T <sub>stg</sub>	Storage Temperature Range	-55~175	$^{\circ}$

#### • THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	2.7	°C/W





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

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	30			V
V <sub>GS(th)</sub>	Gate Threshold Voltage	V <sub>DS</sub> = V <sub>GS</sub> ; I <sub>D</sub> =250μA	1		2.2	V
R <sub>DS(on)</sub>	Drain-Source On-Resistance	V <sub>GS</sub> = 10V; I <sub>D</sub> =30A			8	mΩ
I <sub>GSS</sub>	Gate-Body 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> = 30V; V <sub>GS</sub> = 0;T <sub>j</sub> =25℃			1	μΑ
		V <sub>DS</sub> = 30V; V <sub>GS</sub> = 0;T <sub>j</sub> =125℃			100	
V <sub>SD</sub>	Diode Forward On-Voltage	I <sub>F</sub> = 30A;V <sub>GS</sub> = 0			1.1	V



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