

# isc N-Channel MOSFET Transistor

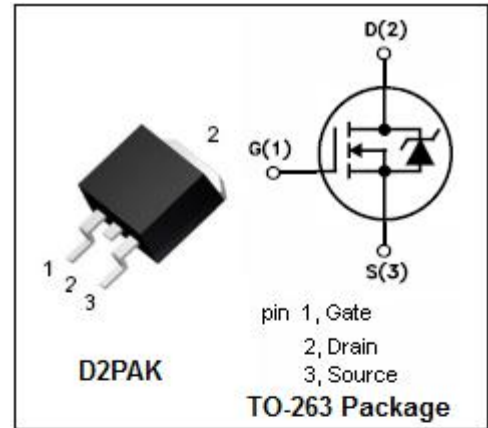
# IPB034N03L

### DESCRIPTION

- Drain Current :  $I_D = 80A @ T_C = 25^\circ C$
- Drain Source Voltage :  $V_{DSS} = 30V(\text{Min})$
- 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.

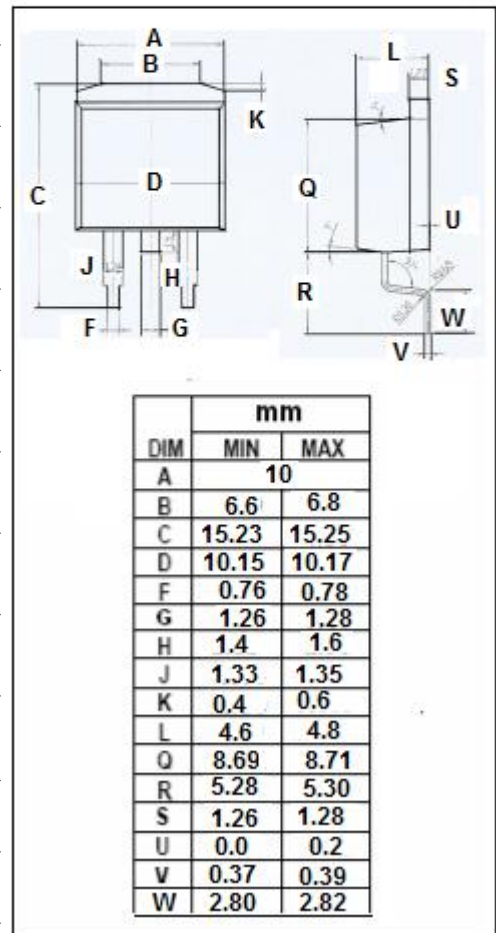


### ABSOLUTE MAXIMUM RATINGS ( $T_C = 25^\circ C$ )

SYMBOL	PARAMETER	VALUE	UNIT
$V_{DSS}$	Drain-Source Voltage ( $V_{GS} = 0$ )	30	V
$V_{GS}$	Gate-Source Voltage	$\pm 20$	V
$I_D$	Drain Current-continuous	80	A
$I_{D(puls)}$	Pulse Drain Current	400	A
$P_{tot}$	Total Dissipation	94	W
$T_j$	Max. Operating Junction Temperature	175	$^\circ C$
$T_{stg}$	Storage Temperature Range	-55~175	$^\circ C$

### THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th j-c}$	Thermal Resistance, Junction to Case	1.6	$^\circ C/W$



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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			3.4	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°C			1	μA
		V <sub>DS</sub> = 30V; V <sub>GS</sub> = 0; T <sub>J</sub> =125°C			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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