

isc N-Channel MOSFET Transistor

APT30M30B2LL

FEATURES

- Drain Current –I_D= 100A@ T_C=25 $^\circ\!\!\mathbb{C}$
- Drain Source Voltage-: V_{DSS}=300V(Min)
- Static Drain-Source On-Resistance : R_{DS(on)} =0.03 Ω (Max)
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

DESCRIPTION

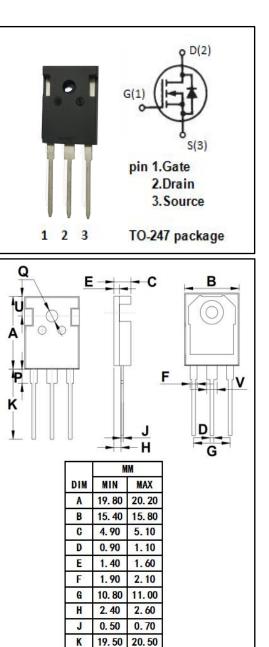
 Designed for use in switch mode power supplies and general purpose applications.

ADSOLUTE MAXIMUM RATINGS(Ta=25 C)						
SYMBOL	PARAMETER VALUE		UNIT			
V _{DSS}	Drain-Source Voltage	300	V			
V _{GS}	Gate-Source Voltage-Continuous ±30		V			
ID	Drain Current-Continuous 100		А			
I _{DM}	Drain Current-Single Pluse 400		A			
PD	Total Dissipation @Tc=25°C 690		W			
TJ	Max. Operating Junction Temperature	-55~150	°C			
T _{stg}	Storage Temperature	-55~150	°C			

ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	МАХ	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	0.18	℃ /W



isc website: <u>www.iscsemi.com</u>

P

Q

U

V

3.90

3.30

5.20

2.90

4.10

3.50

5.40

3.10



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ELECTRICAL CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	МАХ	UNIT
V _{(BR)DSS}	Drain-Source Breakdown Voltage	V _{GS} = 0; I _D = 0.25mA	300		V
$V_{GS(th)}$	Gate Threshold Voltage	V_{DS} = V_{GS} ; I_D = 2.5mA	3	5	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = 10V; I _D =50A		0.03	Ω
lgss	Gate-Body Leakage Current	V _{GS} = ±30V;V _{DS} = 0		±100	nA
I _{DSS}	Zero Gate Voltage Drain Current	V_{DS} = 300V; V_{GS} = 0 V_{DS} = 240V; V_{GS} = 0@T _C =125°C		100 500	μA
V _{SD}	Forward On-Voltage	I _S =-100A; V _{GS} = 0		1.3	V

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