

isc N-Channel MOSFET Transistor

APT18M80B

FEATURES

- Drain Current –I_D=19A@ T_C=25 $^\circ\!\mathrm{C}$
- Drain Source Voltage-: V_{DSS}=800V(Min)
- Static Drain-Source On-Resistance : R_{DS(on)} =0.53 Ω (Max)
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

DESCRIPTION

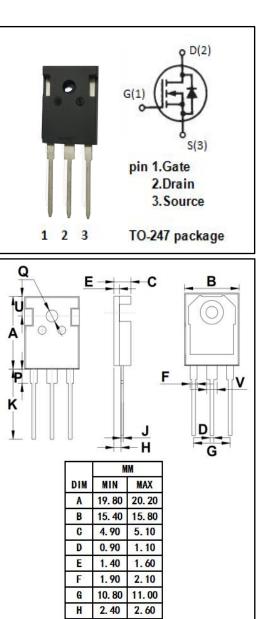
 Designed for use in switch mode power supplies and general purpose applications.

ABSOLUTE MAXIMUM RATINGS(Ta=25 C)						
SYMBOL	PARAMETER	VALUE	UNIT			
V _{DSS}	Drain-Source Voltage	800	V			
V _{GS}	Gate-Source Voltage-Continuous	±30	V			
ID	Drain Current-Continuous	19	А			
I _{DM}	Drain Current-Single Pluse	70	А			
PD	Total Dissipation @Tc=25℃	500	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	0.25	°C/W



J

K

Q

U

V

0.50

19.50

3.90

3.30

5.20

2.90

0.70

20.50

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	800		V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} = V _{GS} ; I _D = 1mA	3	5	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = 10V; I _D =9A		0.53	Ω
lgss	Gate-Body Leakage Current	V _{GS} = ±30V;V _{DS} = 0		±100	nA
I _{DSS}	Zero Gate Voltage Drain Current	V_{DS} = 800V; V_{GS} = 0 V_{DS} = 800V; V_{GS} = 0@T _J =125°C		100 500	μA
V _{SD}	Forward On-Voltage	I _S =-9A; V _{GS} = 0		1	V

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