

isc N-Channel MOSFET Transistor

APT56F50B2

FEATURES

- Drain Current –I_D= 56A@ T_C=25 °C
- Drain Source Voltage-
 - : V_{DSS}=500V(Min)
- Static Drain-Source On-Resistance
 - : $R_{DS(on)}$ =0.1 Ω (Max)
- · 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



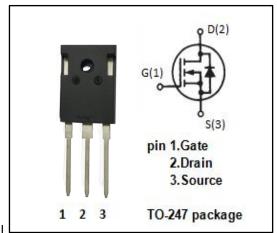
 Designed for use in switch mode power supplies and general purpose applications.

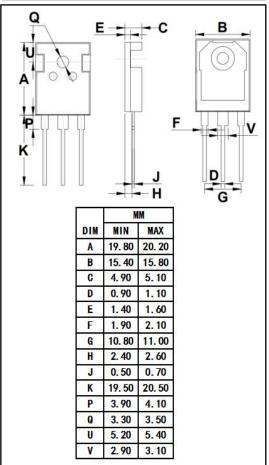
ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	500	V
V _{GS}	Gate-Source Voltage-Continuous	±30	V
ID	Drain Current-Continuous	56	Α
I _{DM}	Drain Current-Single Pluse	175	Α
P _D	Total Dissipation @T _C =25℃	780	W
TJ	Max. Operating Junction Temperature	-55~150	$^{\circ}$
T _{stg}	Storage Temperature	-55~150	$^{\circ}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	0.16	°C/W







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ELECTRICAL CHARACTERISTICS

T_J=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V _{(BR)DSS}	Drain-Source Breakdown Voltage	V _{GS} = 0; I _D = 0.25mA	500		V
V _{GS(th)}	Gate Threshold Voltage	V_{DS} = V_{GS} ; I_D = 2.5mA	2.5	5	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = 10V; I _D =28A		0.1	Ω
Igss	Gate-Body Leakage Current	V _{GS} = ±30V;V _{DS} = 0		±100	nA
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} = 500V; V _{GS} = 0 V _{DS} = 500V; V _{GS} = 0@T _J =125℃		250 1000	μА
V _{SD}	Forward On-Voltage	I _S =-28A; V _{GS} = 0		1.0	V

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