

FEATURES

- With TO-220 packaging
- 150°C junction temperature capability
- Low forward voltage drop
- High current capability
- Low power loss, high efficiency
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

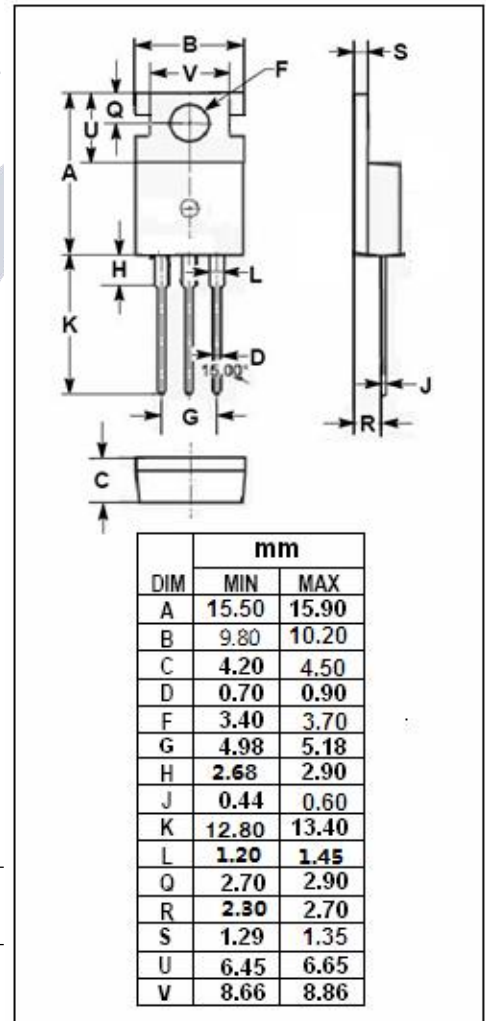
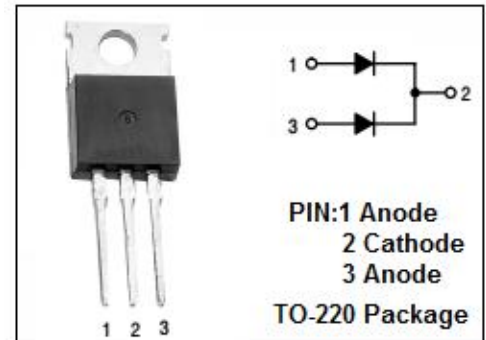
- Switching power supply
- Free-Wheeling diodes
- Reverse battery protection

ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{RRM}	Peak Repetitive Reverse Voltage	30	V
I _{F(AV)}	Average Rectified Forward Current	40	A
I _{FSM}	Nonrepetitive Peak Surge Current tp=5 μs sine	1100	A
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature Range	-55~150	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	2.0	°C/W



Schottky Barrier Rectifier**42CTQ030PBTF****ELECTRICAL CHARACTERISTICS** (Pulse Test: Pulse Width=300 μ s, Duty Cycle \leq 1%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V _F	Maximum Instantaneous Forward Voltage	I _F = 20A ; T _c = 25°C	0.48	V
		I _F = 20A ; T _c = 125°C	0.38	
		I _F = 40A ; T _c = 25°C	0.57	
		I _F = 40A ; T _c = 125°C	0.51	
I _R	Maximum Instantaneous Reverse Current	V _R = V _{RRM} , T _c = 25°C	3	mA
		V _R = V _{RRM} , T _c = 125°C	180	

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