

Schottky Rectifier

47CTQ020

FEATURES

- High frequency operation
- Low forward voltage drop

APPLICATIONS

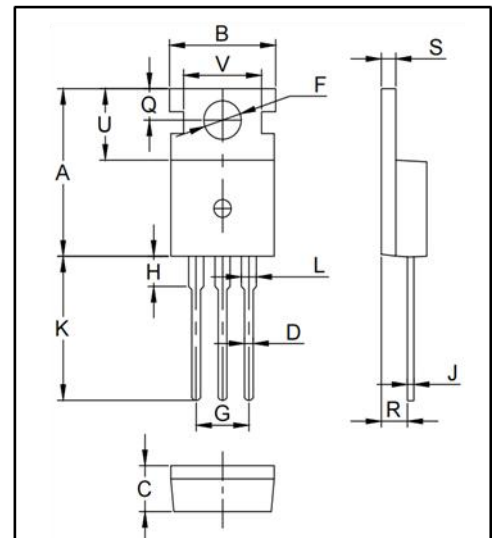
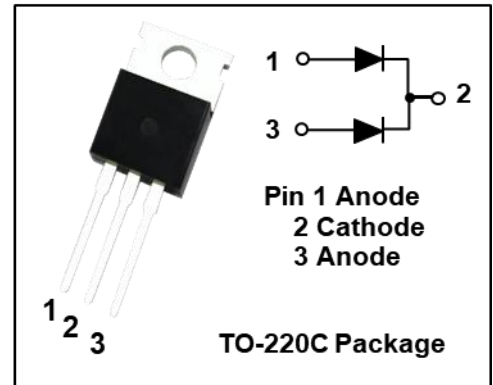
- Converters
- Switching power
- Freewheeling diodes, and reverse battery protection

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{RRM}	Peak Repetitive Reverse Voltage	20	V
I _{F(AV)}	Average Rectified Forward Current 50 % duty cycle at T _C = 135°C	2*20	A
I _{FSM}	Non-repetitive Peak Surge Current tp = 5 μs sine	1000	A
T _J	Junction Temperature	-55~150	°C
T _{stg}	Storage Temperature Range	-55~150	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	0.75	°C/W



DIM	mm		
	MIN	TYP.	MAX
A	15.50	15.70	15.90
B	9.80	10.00	10.20
C	4.20	4.35	4.50
D	0.70	0.80	0.90
F	3.40	3.55	3.70
G	4.98	5.08	5.18
H	2.68	2.79	2.90
J	0.44	0.52	0.60
K	12.80	13.10	13.40
L	1.20	1.32	1.45
Q	2.70	2.80	2.90
R	2.30	2.50	2.70
S	1.29	1.32	1.35
U	6.45	6.55	6.65
V	8.66	8.76	8.86

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ELECTRICAL CHARACTERISTICS($T_J = 25\text{ }^\circ\text{C}$ unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum Instantaneous Forward Voltage	$I_F = 20\text{A}, T_J = 25\text{ }^\circ\text{C}$	0.45	V
		$I_F = 40\text{A}, T_J = 25\text{ }^\circ\text{C}$	0.51	
		$I_F = 20\text{A}, T_J = 125\text{ }^\circ\text{C}$	0.34	
		$I_F = 40\text{A}, T_J = 125\text{ }^\circ\text{C}$	0.44	
I_R	Maximum Instantaneous Reverse Current	$V_R = V_{RWM}$	3	mA
		$V_R = V_{RWM}, T_J = 125\text{ }^\circ\text{C}$	310	

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