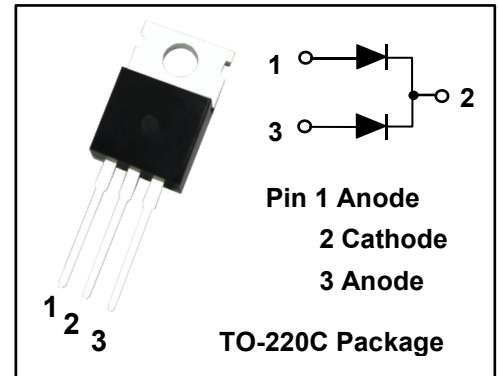# Schottky Rectifier

30CTQ045

FEATURES

· High frequency operation

· Low forward voltage drop
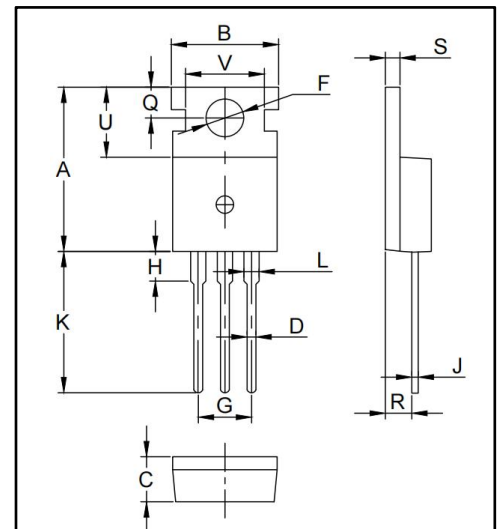
APPLICATIONS

· Converters

· Switching power

· Freewheeling diodes, and reverse battery protection

Pin 1 Anode

2 Cathode

3 Anode

TO-220C Package

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{RRM}	Peak Repetitive Reverse Voltage	45	V
$I_{F(AV)}$	Average Rectified Forward Current	2*15	A
I_{FSM}	Non-repetitive Peak Surge Current tp = 5 μs sine	1060	A
T_J	Junction Temperature	-55~175	℃
T_{stg}	Storage Temperature Range	-55~175	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case per diode	1.63	℃/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

ELECTRICAL CHARACTERISTICS(T_J = 25 °C unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum Instantaneous Forward Voltage	I_F= 15A, T_J= 25℃	0.62	V
		I_F= 30A, T_J= 25℃	0.76	
		I_F= 15A, T_J= 125℃	0.56	
		I_F= 30A, T_J= 125℃	0.70	
I_R	Maximum Instantaneous Reverse Current	V_R= V_{RWM}	2	mA
		V_R= V_{RWM}, T_J= 125℃	15	

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