

Schottky Rectifier

30CTQ100

FEATURES

- High frequency operation
- Low forward voltage drop

APPLICATIONS

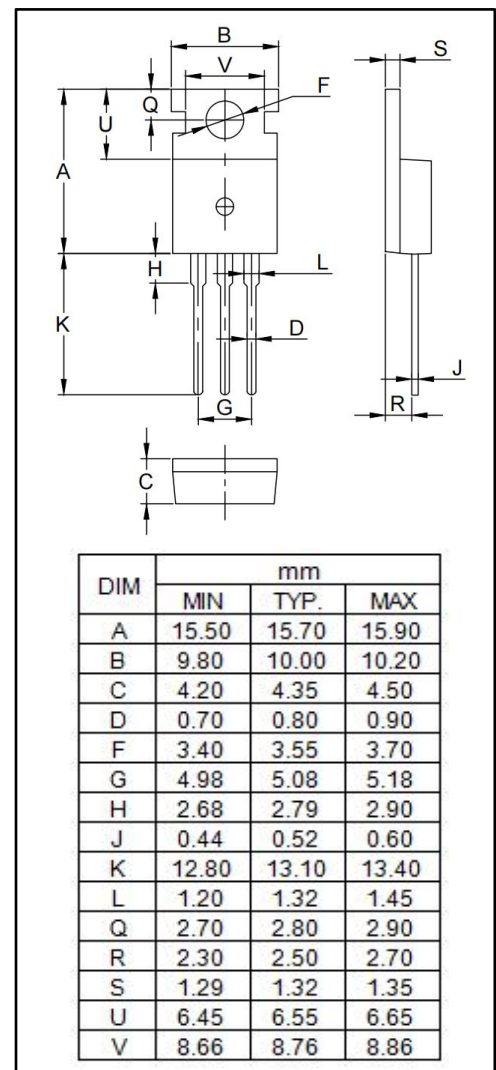
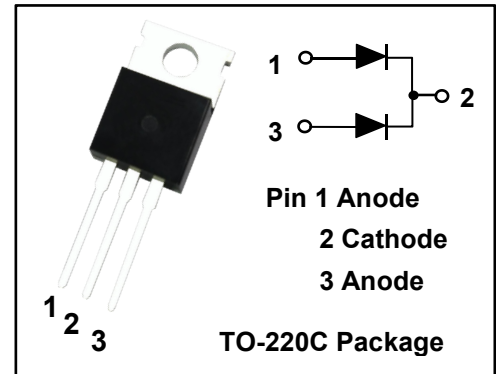
- Converters
- Switching power
- Freewheeling diodes, and reverse battery protection

ABSOLUTE MAXIMUM RATINGS($T_a=25^{\circ}\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{RRM}	Peak Repetitive Reverse Voltage	100	V
$I_{F(AV)}$	Average Rectified Forward Current 50 % duty cycle at $T_c = 105^{\circ}\text{C}$	2*15	A
I_{FSM}	Non-repetitive Peak Surge Current $t_p = 5 \mu\text{s}$ sine	850	A
T_j	Junction Temperature	-55~175	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-55~175	$^{\circ}\text{C}$

THERMAL CHARACTERISTICS

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



Schottky Rectifier

30CTQ100

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

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum Instantaneous Forward Voltage	$I_F = 15\text{A}, T_J = 25^\circ\text{C}$	0.86	V
		$I_F = 30\text{A}, T_J = 25^\circ\text{C}$	1.05	
		$I_F = 15\text{A}, T_J = 125^\circ\text{C}$	0.67	
		$I_F = 30\text{A}, T_J = 125^\circ\text{C}$	0.82	
I_R	Maximum Instantaneous Reverse Current	$V_R = V_{RWM}$	0.55	mA
		$V_R = V_{RWM}, T_J = 125^\circ\text{C}$	7.0	

PRODUCT DISCLAIMER

ISC reserves the rights to make changes of the content herein the datasheet at any time without notification. The information contained herein is presented only as a guide for the applications of our products.

ISC products are intended for usage in general electronic equipment. The products are not designed for use in equipment which require specialized quality and/or reliability, or in equipment which could have applications in hazardous environments, aerospace industry, or medical field. Please contact us if you intend our products to be used in these special applications.

ISC makes no warranty or guarantee regarding the suitability of its products for any particular purpose, nor does ISC assume any liability arising from the application or use of any products, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages.

It is strictly prohibited to reprint or copy part or all of this datasheet without permission from ISC.