

# **Schottky Rectifier**

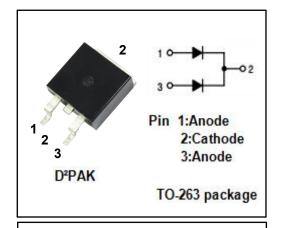
30CTQ045S

#### **FEATURES**

- · High frequency operation
- · Low forward voltage drop

### **APPLICATIONS**

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



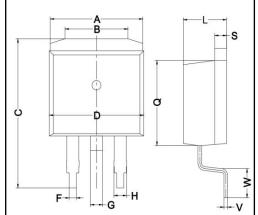
### ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>RRM</sub>	Peak Repetitive Reverse Voltage	45	V
I <sub>F(AV)</sub>	Average Rectified Forward Current	2*15	А
IFSM	Non-repetitive Peak Surge Current tp = 5 µs sine	1060	Α
TJ	Junction Temperature	-55~175	${\mathbb C}$
T <sub>stg</sub>	Storage Temperature Range	-55~175	$^{\circ}$

#### THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal Resistance,Junction to Case per diode	1.63	°C/W

1



DIM		mm	
DIIVI	MIN	TYP.	MAX
Α	9.80	10.00	10.20
В	6.60	6.70	6.80
C	15.10	15.20	15.30
D	9.60	9.80	10.00
F	0.70	0.80	0.90
G	1.26	1.28	1.30
Н	1.20	1.33	1.45
L	4.40	4.50	4.60
Q	9.20	9.25	9.30
S	1.25	1.30	1.35
V	0.40	0.50	0.60
W	2.60	2.70	2.80



## **Schottky Rectifier**

30CTQ045S

### ELECTRICAL CHARACTERISTICS(T<sub>J</sub> = 25 ° C unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V <sub>F</sub>	Maximum Instantaneous Forward Voltage	I <sub>F</sub> = 15A, T <sub>J</sub> = 25℃	0.62	V
		I <sub>F</sub> = 30A, T <sub>J</sub> = 25°C	0.76	
		I <sub>F</sub> = 15A, T <sub>J</sub> = 125℃	0.56	
		I <sub>F</sub> = 30A, T <sub>J</sub> = 125℃	0.70	
I <sub>R</sub>	Maximum Instantaneous Reverse Current	V <sub>R</sub> = V <sub>RWM</sub>	2	mA
		V <sub>R</sub> = V <sub>RWM</sub> , T <sub>J</sub> = 125°C	15	

#### 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.