

# PH868C12 (30A)

(120V / 30A)

[0401]

## High Voltage Schottky barrier diode

### Major characteristics

Characteristics	PH868C12	Units	Condition
V <sub>RRM</sub>	120	V	
V <sub>F</sub>	0.88	V	T <sub>c</sub> =25°C MAX.
I <sub>o</sub>	30	A	

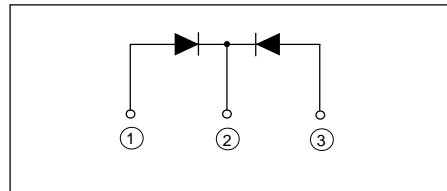
### Features

- Low V<sub>F</sub>
- High Voltage
- Center tap connection

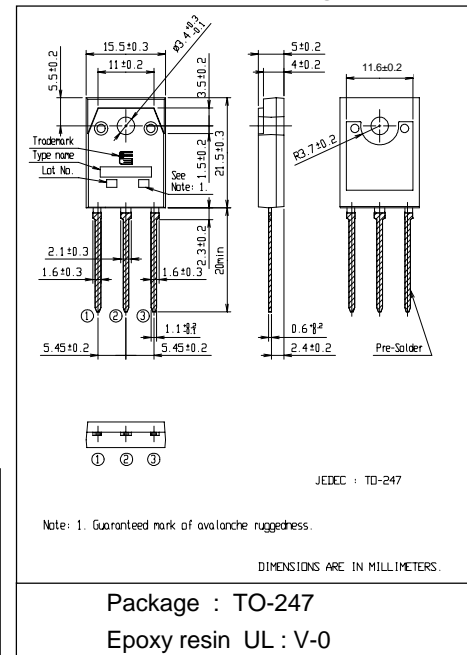
### Applications

- High frequency operation
- DC-DC converters
- AC adapter

### Connection diagram



### Outline drawings, mm



### Maximum ratings and characteristics

- Absolute maximum ratings (at T<sub>c</sub>=25°C Unless otherwise specified)

Item	Symbol	Conditions	Rating	Unit
Repetitive peak surge reverse voltage	V <sub>RSM</sub>	tw=500ns, duty=1/40	120	V
Repetitive peak reverse voltage	V <sub>RRM</sub>		120	V
Average output current	I <sub>o</sub>	Square wave, duty=1/2 T <sub>c</sub> =122°C	30 *	A
Non-repetitive surge current **	I <sub>FSM</sub>	Sine wave 10ms 1shot	225	A
Operating junction temperature	T <sub>j</sub>		+150	°C
Storage temperature	T <sub>stg</sub>		-40 to +150	°C

\* Out put current of center tap full wave connection

\*\*Rating per element

- Electrical characteristics (at T<sub>c</sub>=25°C Unless otherwise specified)

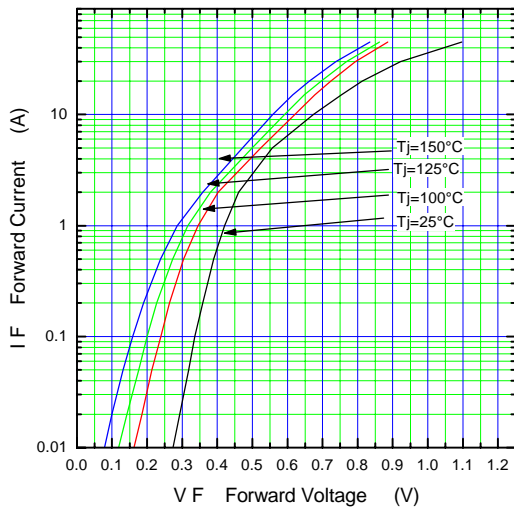
Item	Symbol	Conditions	Max.	Unit
Forward voltage drop	V <sub>F</sub>	I <sub>FM</sub> =15A	0.88	V
Reverse current	I <sub>R</sub>	V <sub>R</sub> =V <sub>RRM</sub>	200	μA
Thermal resistance	R <sub>th(j-c)</sub>	Junction to case	1.2	°C/W

- Mechanical characteristics

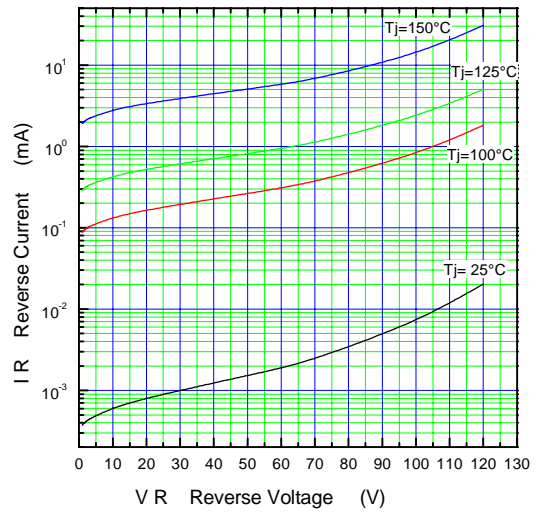
Mounting torque	Recommended torque	0.4 to 0.6	N·m
Approximate mass		4.9	g

■ Characteristics

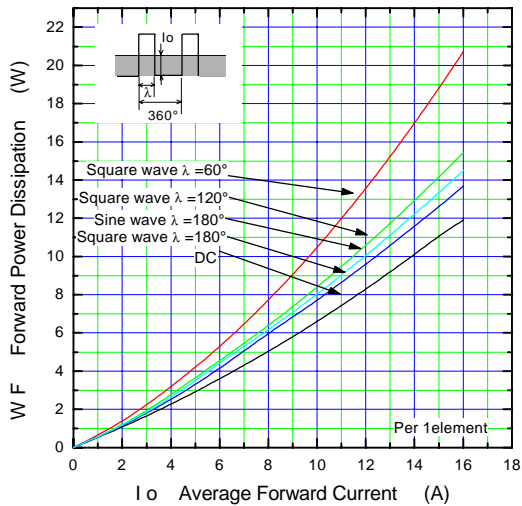
Forward Characteristic (typ.)



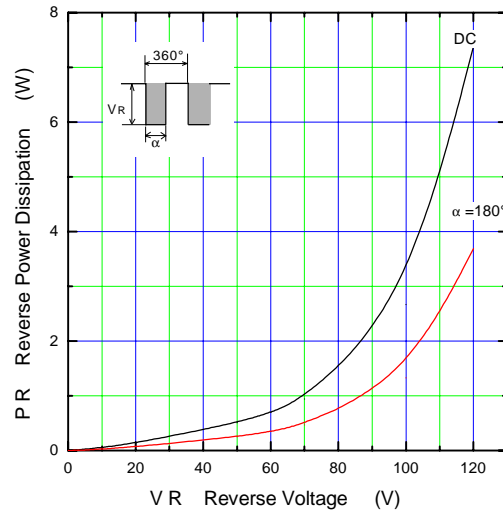
Reverse Characteristic (typ.)



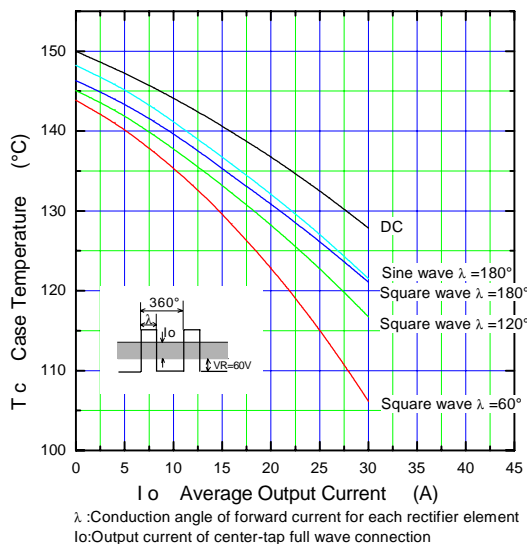
Forward Power Dissipation (max.)



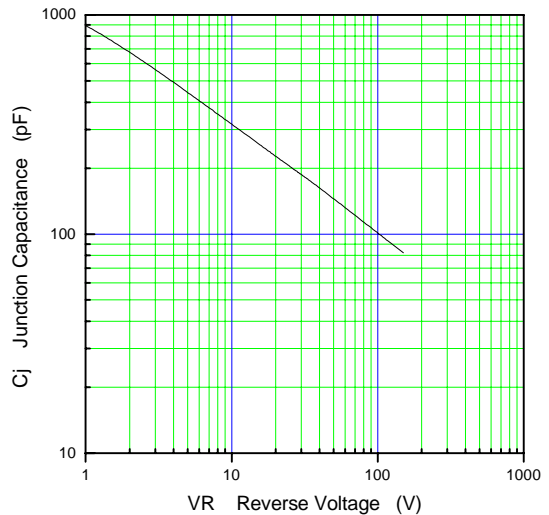
Reverse Power Dissipation (max.)



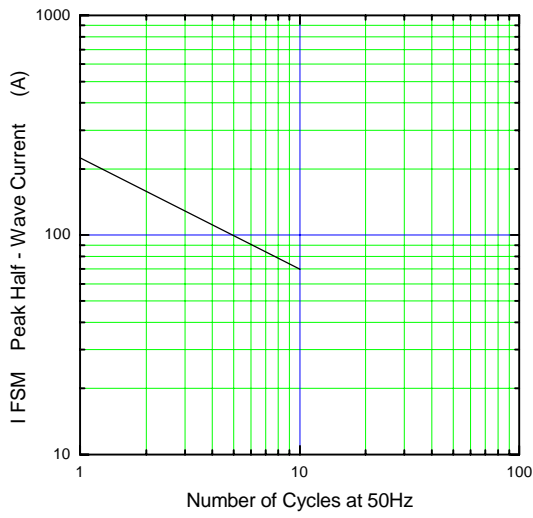
Current Derating ( $I_o$ - $T_c$ ) (max.)



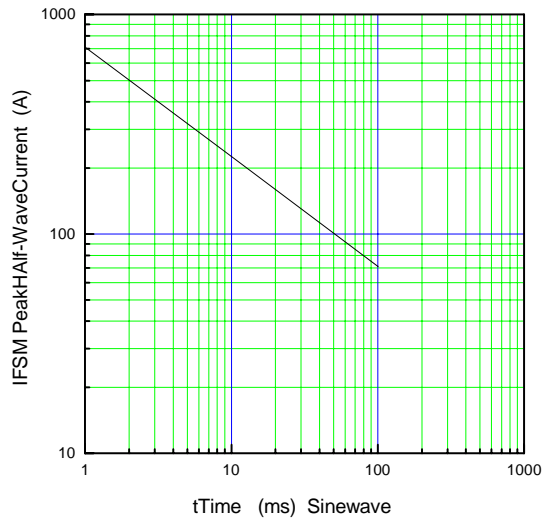
Junction Capacitance Characteristic (max.)



Surge Capability (max.)



Surge Current Ratings (max.)



Transient Thermal Impedance (max.)

