

PH868C12 (30A)

(120V / 30A)

[0401]

High Voltage Schottky barrier diode

Major characteristics

Characteristics	PH868C12	Units	Condition
V_{RRM}	120	V	
V_F	0.88	V	$T_c=25^\circ\text{C MAX.}$
I_o	30	A	

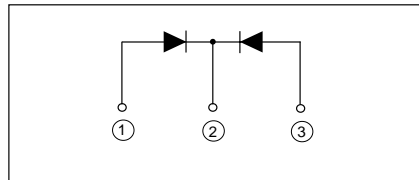
Features

- Low V_F
- High Voltage
- Center tap connection

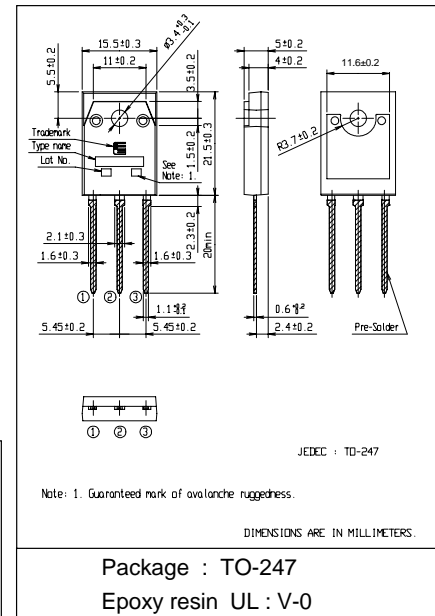
Applications

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

Connection diagram



Outline drawings, mm



Maximum ratings and characteristics

- Absolute maximum ratings (at $T_c=25^\circ\text{C}$ Unless otherwise specified)

Item	Symbol	Conditions	Rating	Unit
Repetitive peak surge reverse voltage	V_{RSM}	$tw=500\text{ns}$, $duty=1/40$	120	V
Repetitive peak reverse voltage	V_{RRM}		120	V
Average output current	I_o	Square wave, $duty=1/2$ $T_c=122^\circ\text{C}$	30 *	A
Non-repetitive surge current **	I_{FSM}	Sine wave 10ms 1shot	225	A
Operating junction temperature	T_j		+150	$^\circ\text{C}$
Storage temperature	T_{stg}		-40 to +150	$^\circ\text{C}$

* Out put current of center tap full wave connection

**Rating per element

- Electrical characteristics (at $T_c=25^\circ\text{C}$ Unless otherwise specified)

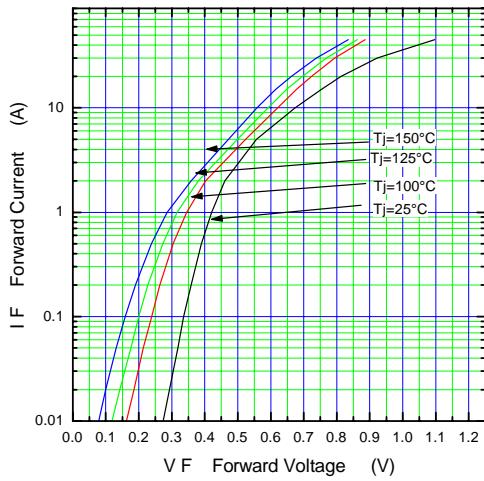
Item	Symbol	Conditions	Max.	Unit
Forward voltage drop	V_F	$I_{FM}=15\text{A}$	0.88	V
Reverse current	I_R	$V_R=V_{RRM}$	200	μA
Thermal resistance	$R_{th(j-c)}$	Junction to case	1.2	$^\circ\text{C/W}$

- Mechanical characteristics

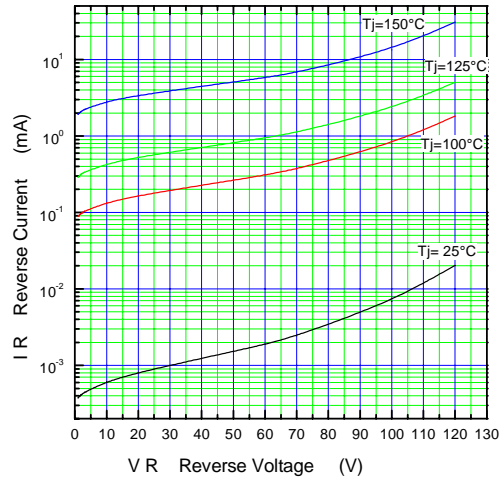
Mounting torque	Recommended torque	0.4 to 0.6	N·m
Approximate mass		4.9	g

Characteristics

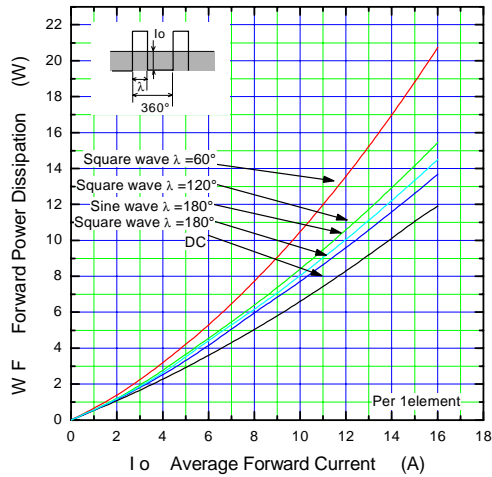
Forward Characteristic (typ.)



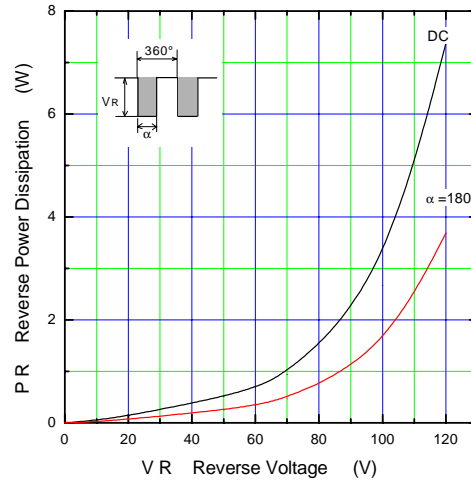
Reverse Characteristic (typ.)



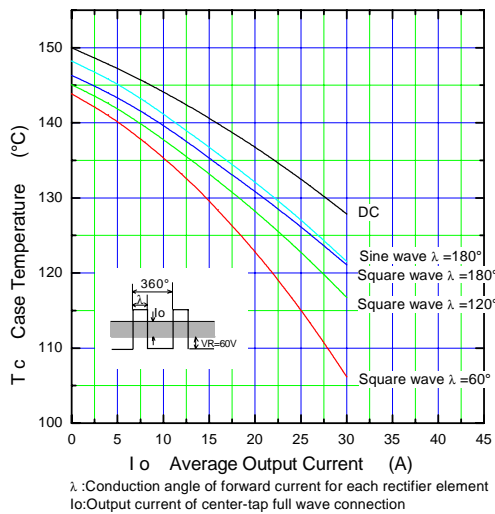
Forward Power Dissipation (max.)



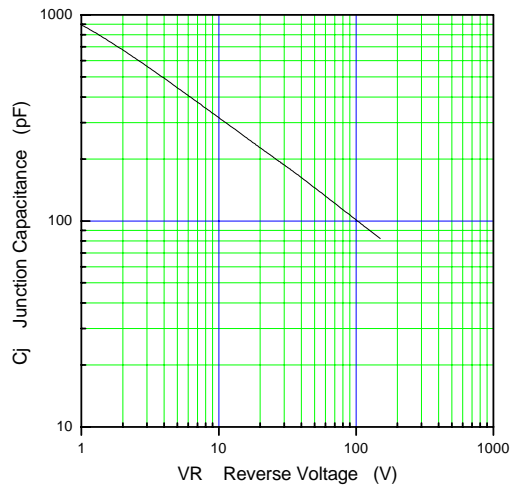
Reverse Power Dissipation (max.)



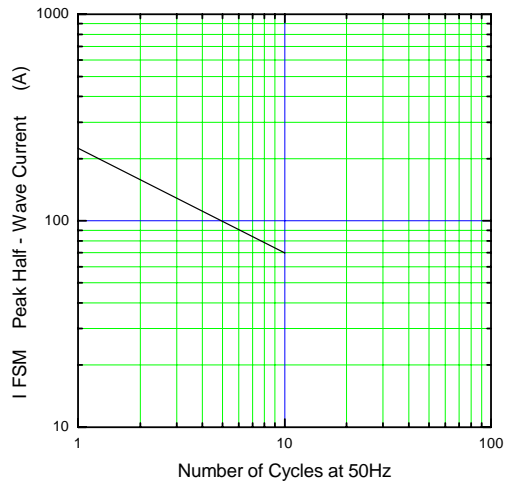
Current Derating (I_o - T_c) (max.)



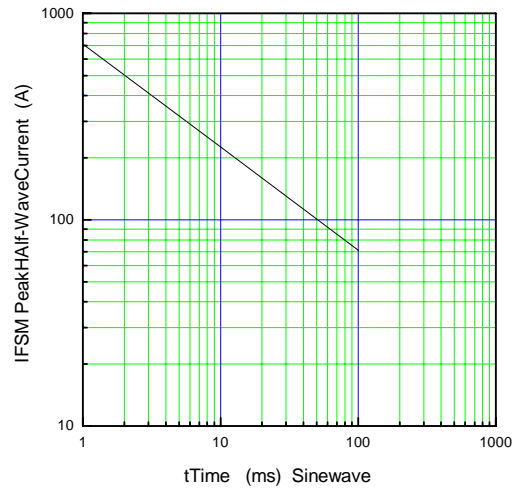
Junction Capacitance Characteristic (max.)



Surge Capability (max.)



Surge Current Ratings (max.)



Transient Thermal Impedance (max.)

