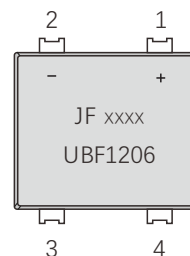


UBF

## FEATURES:

- Glass Passivated Chip Junction
- Reverse Voltage - 600 V
- Forward Current - 12.0 A
- Designed for Surface Mount Application

HALOGEN  
FREE

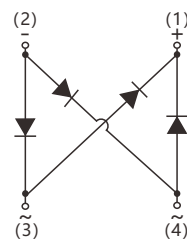


Marking:

JF:Logo  
xxxx:Date code  
UBF1206:Type  
+ -:Polarity

## MECHANICAL DATA

- Case: UBF
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.461g / 0.0163oz



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

PARAMETER	SYMBOL	UBF1206	Units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	600	V
Maximum RMS voltage	$V_{RMS}$	420	V
Maximum DC Blocking Voltage	$V_{DC}$	600	V
Average Rectified Output Current at $T_c=80^\circ\text{C}$	$I_o$	12.0	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	350	A
$I^2t$ Rating for Fusing ( $t=8.3\text{ms}$ )	$I^2t$	508	$\text{A}^2\text{S}$
Typical Thermal Resistance <sup>(1)</sup>	$R_{\theta JA}$ $R_{\theta JC}$ $R_{\theta JL}$	60 6 14	$^\circ\text{C/W}$
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 ~ +150	$^\circ\text{C}$

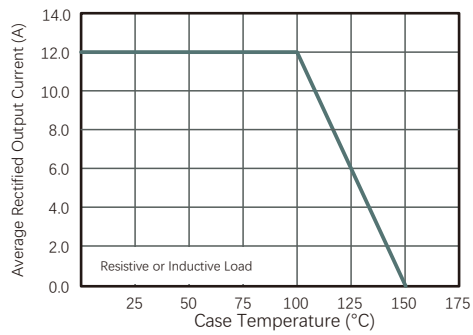
(1) Mounted on glass epoxy PC board with 4 X 1.5" X 1.5" (3.81X3.81cm) copper pad

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

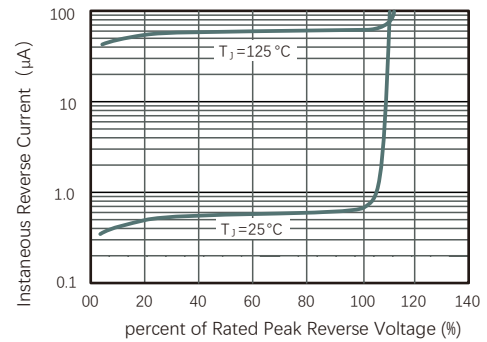
Ratings at 25°C ambient temperature unless otherwise specified

PARAMETER	SYMBOL	TEST CONDITIONS	TYP	MAX	Units
Instantaneous forward voltage	$V_F$	$I_F=12\text{A}$ $T_j=25^\circ\text{C}$	—	1.00	V
Reverse current at DC blocking voltage	$I_R$	$T_j=25^\circ\text{C}$ $T_j=125^\circ\text{C}$	—	5 100	$\mu\text{A}$
Typical Junction Capacitance	$C_j$	$f=1\text{MHz}$ , $V_R=4\text{V DC}$ $T_j=25^\circ\text{C}$	82	—	pF

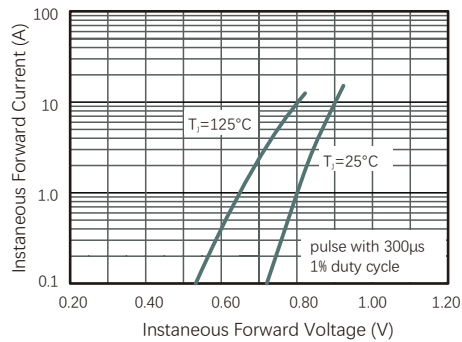
**Fig.1 Average Rectified Output Current Derating Curve**



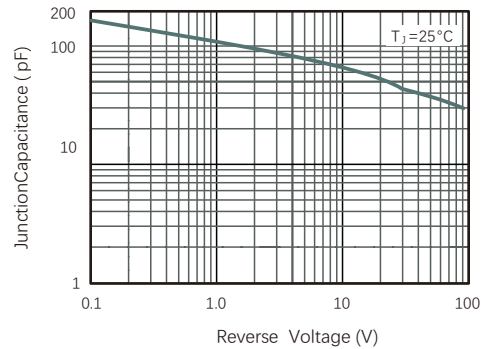
**Fig.2 Typical Reverse Characteristics**



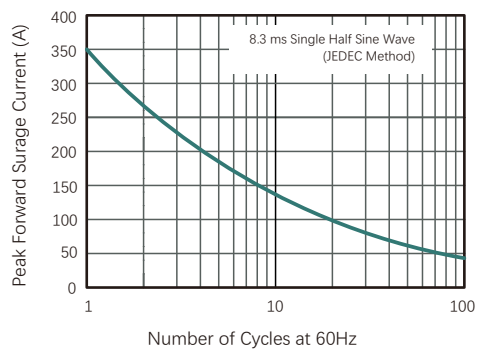
**Fig.3 Typical Instantaneous Forward Characteristics**



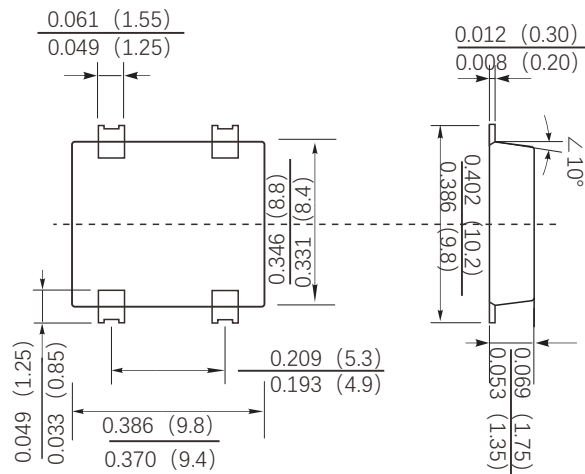
**Fig.4 Typical Junction Capacitance**



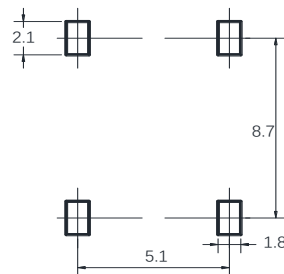
**Fig.5 Maximum Non-Repetitive Peak Forward Surge Current**



## UBF



## Suggested solder pad layout



(设计者可参考推荐值根据焊接工艺要求自行确定适合的焊盘尺寸)  
(Designers can refer to the recommended values according to the manufacturing process requirements to determine the appropriate pad size)

Dimensions in millimeters

## Friendship Reminder

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