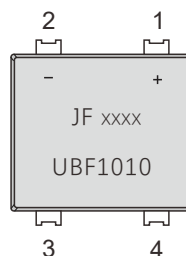


FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Glass passivated chip junction
- Very high forward surge current capability
- Low forward voltage drop, High current capability
- High temperature soldering guaranteed: 260°C/10 seconds at terminals
- Component in accordance to RoHS 2015/863/EU

**HALOGEN
FREE**

UBF



Marking:

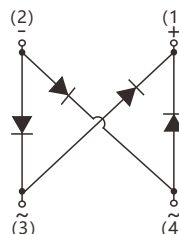
JF: Logo
xxxx: Date code
UBF1010: Type
+ -: Polarity

MECHANICAL DATA

- Case: UBF molded plastic body
- Terminals: Plated leads solderable per MIL-STD-750, method 2026
- Mounting Position: Any

TYPICAL APPLICATIONS

Used in AC/DC bridge full wave rectification for SMPS, lighting ballaster, adapter, charger, home appliances, office equipment, and telecommunication applications.



MAXIMUM RATINGS

(Ratings at 25°C ambient temperature unless otherwise specified)

Parameter	Symbol	Value	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	1000	V
Maximum average forward rectified current	$I_{F(AV)}$	10.0	A
Peak forward surge current 8.3ms single half Sine-wave	I_{FSM}	250	A
Rating for fusing (t=8.3ms)	I^2t	259	A ² s
Operating junction temperature range	T_J	-55 to +150	°C
Storage temperature range	T_{stg}	-55 to +150	°C

ELECTRICAL CHARACTERISTICS (T_J=25°C Unless otherwise noted)

Parameter	Test Conditions		Symbol	Min.	Typ.	Max	Unit
Breakdown voltage Blocking voltage	I _r =100μA		V _{BR} V _R	1000	-	-	V
Instaneous forward voltage	T _J =25°C	I _f =1.0A	V _F 1)	-	0.81	-	V
		I _f =5.0A		-	0.89	-	
		I _f =10.0A		-	0.95	1.10	
	T _J =125°C	I _f =1.0A		-	0.67	-	
		I _f =5.0A		-	0.77	-	
		I _f =10.0A		-	0.84	-	
Reverse current	T _J =25°C	V _R =1000V	I _R 2)	-	-	5	μA
	T _J =100°C			-	-	25	μA
	T _J =125°C			-	-	100	
Junction capacitance	4V,1MHz		C _J	-	52	-	pF

Notes: 1.Pulse test: 300 μs pulse width,1% duty cycle

2.Pulse test: pulse width ≤40ms

THERMAL CHARACTERISTICS

Parameter	Symbol	UBF	Unit
Typical thermal resistance ³⁾	ReJA	60	°C/W
	ReJc	10	

Notes3: Mounted on glass epoxy PC board with 4×1.5"×1.5"(3.81×3.81cm)copper pad.

AVAILABALE PACK INFORMATION

Product code	Pack	Reel Size (mm)	Quantity (pcs/reel)	Quantity (reel/box)	Quantity (box/carton)	Quantity (K/carton)
UBF1010-UBF	T/R	Φ330	3000	2	5	30

FIG.1-FORWARD CURRENT DERATING CURVE

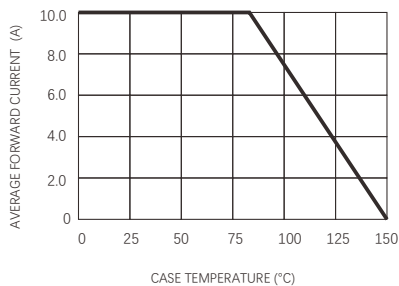


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

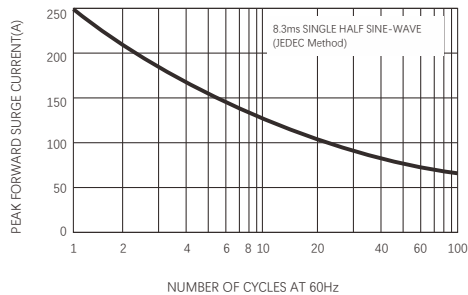


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

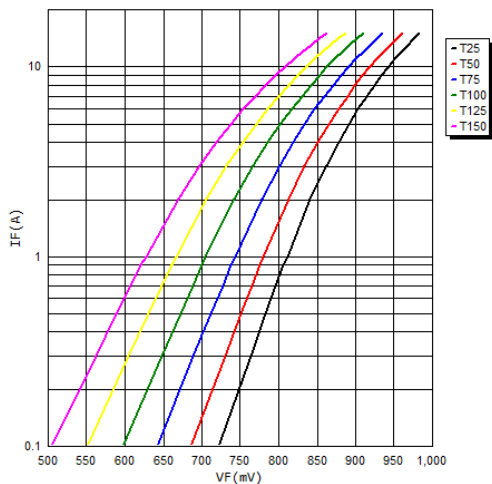


FIG.4-TYPICAL REVERSE CHARACTERISTICS

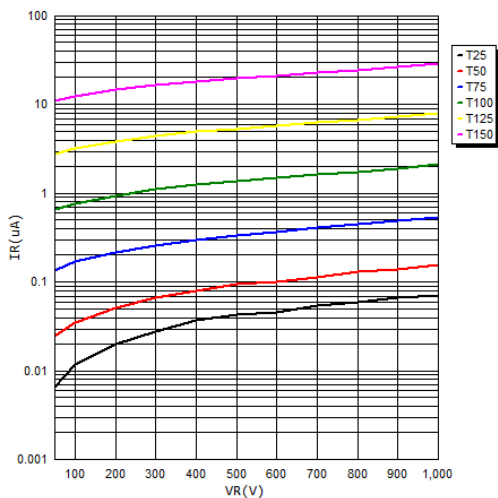
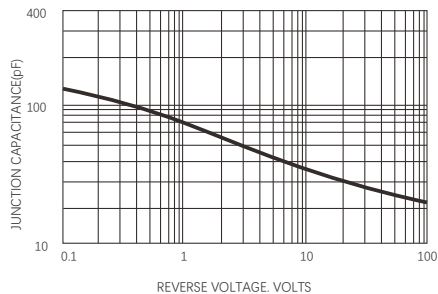
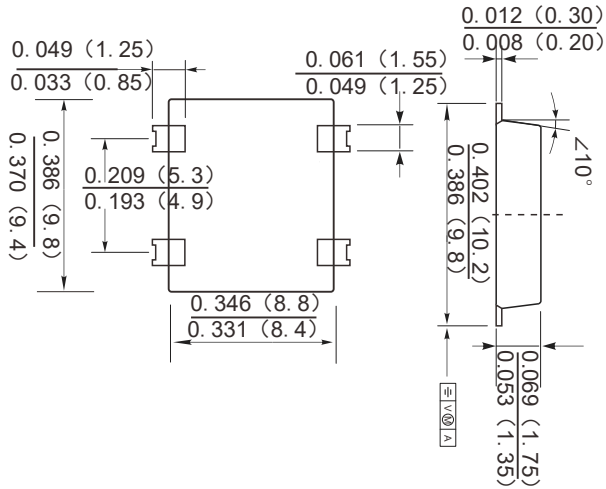


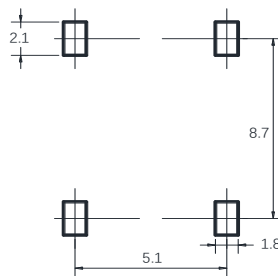
FIG.5-TYPICAL JUNCTION CAPACITANCE



UBF



Suggested solder pad layout



Dimensions in millimeters

Friendship Reminder

- JiNan JingHeng (hereinafter referred to as JH) reserves the right to make changes to this document and its products and specifications at anytime without notice.
- Customers should obtain and confirm the latest product information and specifications before final design, purchase or use.
- JH makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does JH assume any liability for application assistance or customer product design.
- JH does not warrant or accept any liability with products which are purchased or used for any unintended or unauthorized application.
- No license is granted by implication or otherwise under any intellectual property rights of JH.
- JH's products are not authorized for use as critical components in life support devices or systems without express written approval of JH.