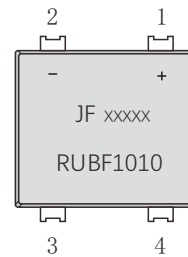


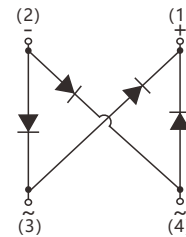
UBF



Marking:

JF:Logo
xxxxx:Date code
RUBF1010: Type
+ -:Polarity

HALOGEN
FREE



FEATURES:

- Glass Passivated Chip Junction
- Reverse Voltage - 1000 V
- Forward Current - 10.0 A
- Fast reverse recovery time
- Designed for Surface Mount Application

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	RUBF1010	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	1000	V
Maximum RMS voltage	V_{RMS}	700	V
Maximum DC Blocking Voltage	V_{DC}	1000	V
Average Rectified Output Current at $T_c = 80^\circ\text{C}$	I_o	10.0	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	250	A
I^2t Rating for Fusing ($t=8.3\text{ms}$)	I^2t	259	A^2S
Typical Thermal Resistance ⁽¹⁾	$R_{\theta JA}$ $R_{\theta JC}$ $R_{\theta JL}$	60 5 14	$^\circ\text{C}/\text{W}$
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	$I_F = 10\text{A}$ $T_j = 25^\circ\text{C}$	-	1.3	V
Reverse current at DC blocking voltage	I_R	$T_j = 25^\circ\text{C}$ $T_j = 125^\circ\text{C}$	-	5 100	μA
Maximum Reverse Recovery Time	t_{rr}	Measured with $I_F = 0.5\text{A}$, $I_R = 1\text{A}$, $I_{rr} = 0.25\text{A}$.	-	500	ns
Typical Junction Capacitance	C_j	$f = 1\text{MHz}$, $V_R = 4\text{V DC}$ $T_j = 25^\circ\text{C}$	110	-	pF

Fig.1 Average Rectified Output Current Derating Curve

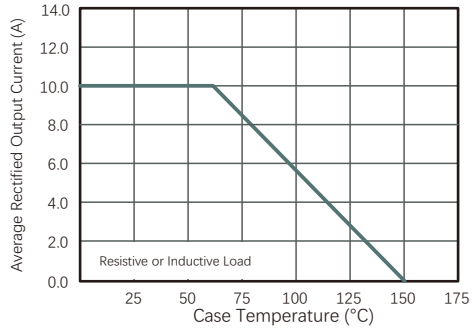


Fig.2 Typical Reverse Characteristics

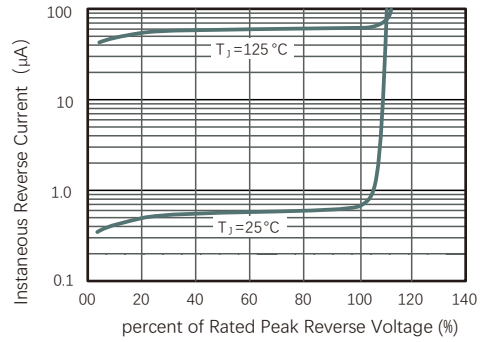


Fig.3 Typical Instantaneous Forward Characteristics

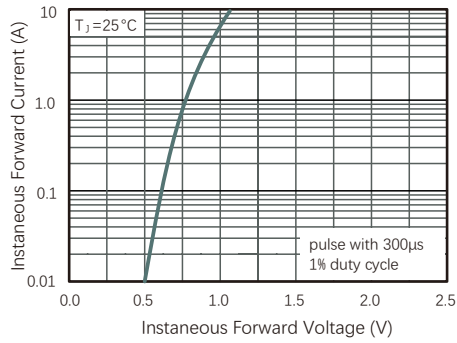


Fig.4 Typical Junction Capacitance

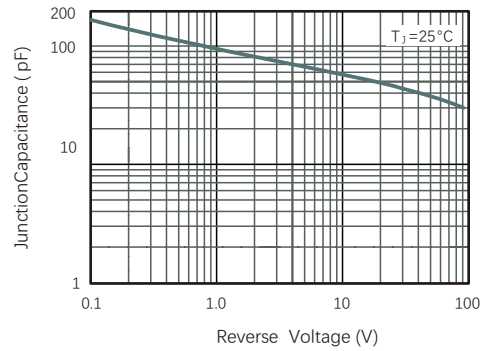


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

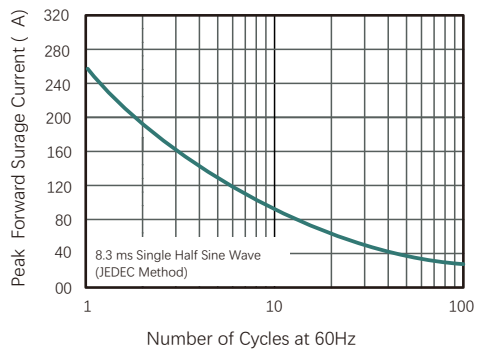
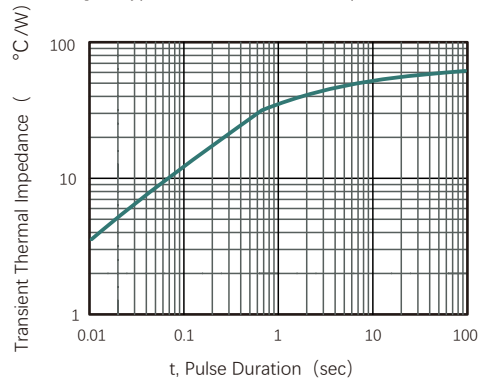
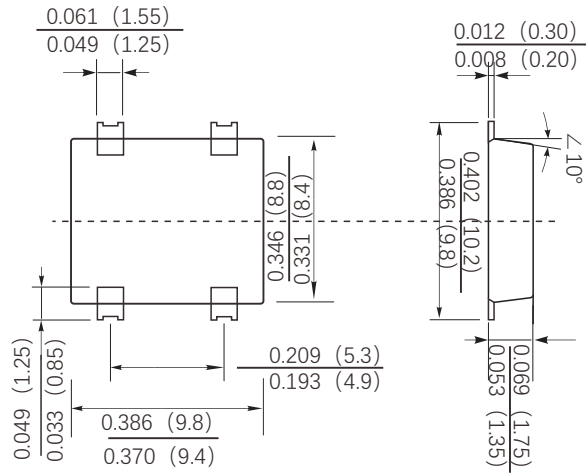


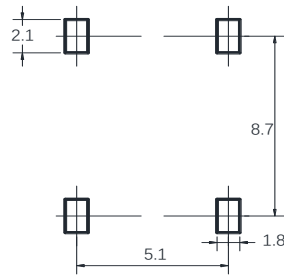
Fig.6- Typical Transient Thermal Impedance



UBF



Suggested solder pad layout



Dimensions in millimeters

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