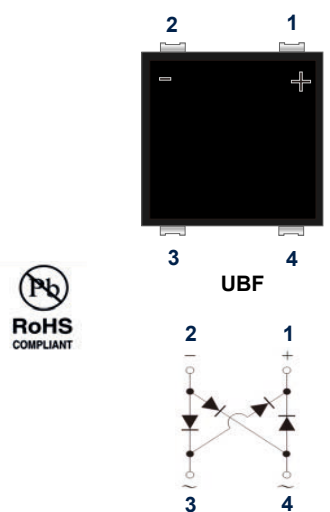


Features

- Glass passivated chip junction
- 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



Schematic Diagram

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

Parameters	Symbol	Value	Unit
Maximum Repetitive 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	6.0	A
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	200	A
I^2t Rating for Fusing ($t=8.3\text{ms}$)	I^2t	166	A^2S
Typical Thermal Resistance, Junction-Ambient ¹	$R_{\theta JA}$	60	$^\circ\text{C/W}$
Typical Thermal Resistance, Junction-Case ¹	$R_{\theta JC}$	6	
Typical Thermal Resistance, Junction-Lead ¹	$R_{\theta JL}$	14	
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150	$^\circ\text{C}$

Note:

1. Mounted on glass epoxy PC board with 4 x 1.5" x 1.5" (3.81x3.81cm) copper pad.

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

Parameters	Symbol	Test Condition	Typ	Max	Unit
Instantaneous Forward Voltage	V_F	$I_F=6\text{A}, T_J=25^\circ\text{C}$	-	1.3	V
Reverse Current at DC Blocking Voltage	I_R	$T_J=25^\circ\text{C}$	-	5	μA
		$T_J=125^\circ\text{C}$	-	200	
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	$f=1\text{MHz}, V_R=4\text{V DC}, T_J=25^\circ\text{C}$	80	-	pF

Ratings and Characteristics Curves

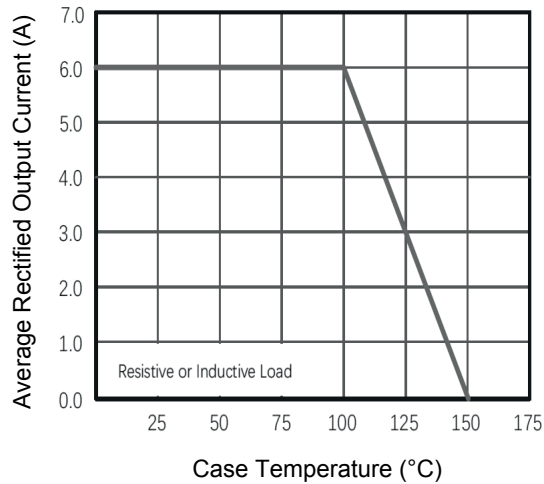


Figure 1. Average Rectified Output Current Derating Curve

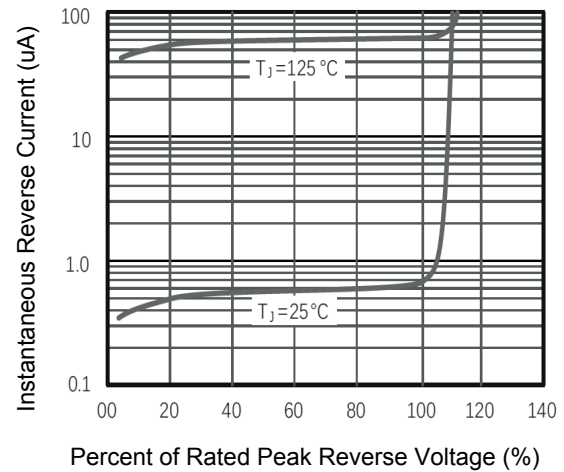


Figure 2. Typical Reverse Characteristics

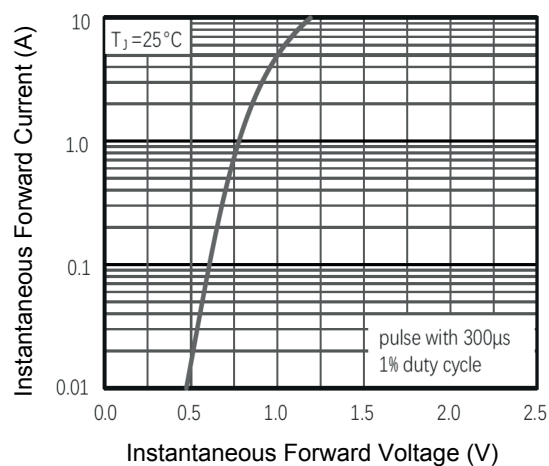


Figure 3. Typical Instantaneous Forward Characteristics

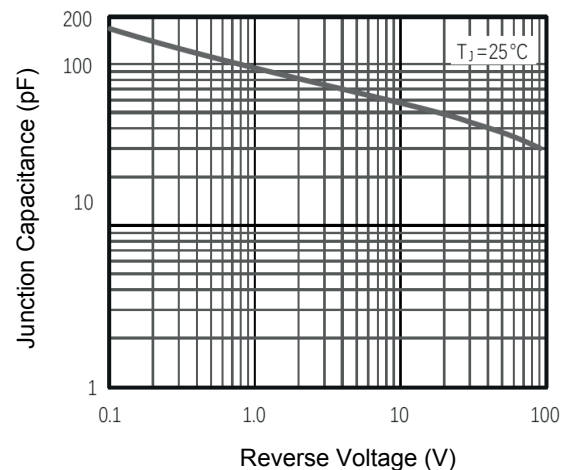


Figure 4. Typical Junction Capacitance

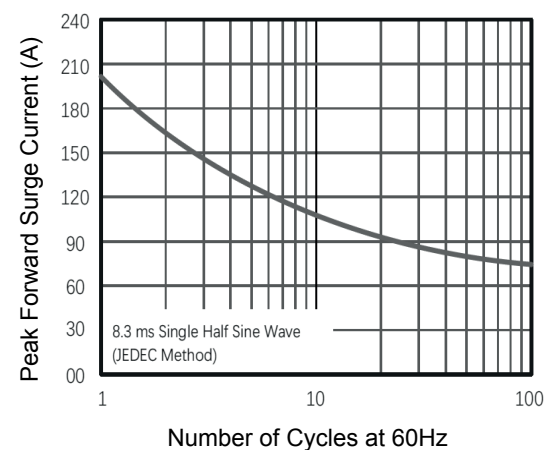
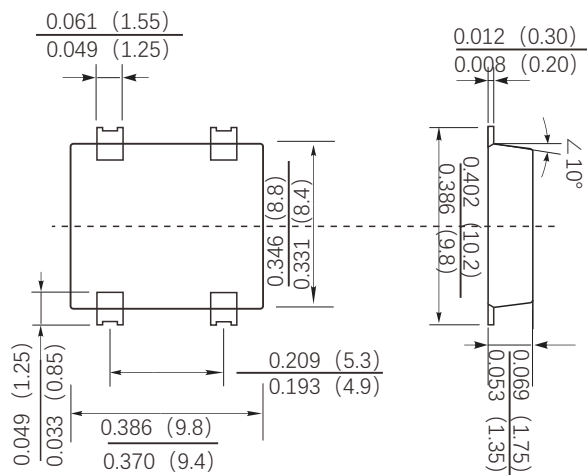


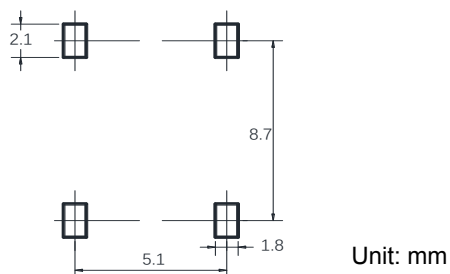
Figure 5. Maximum Non-Repetitive Peak Forward Surge Current

Package Outline Dimensions (UBF)



Dimensions in inches and (millimeters)

Recommended Pad Layout



Order Information

Device	Package	Marking	Carrier	Quantity
GSRUBF610	UBF	RUBF610	Tape & Reel	3,000 Pcs / Reel