

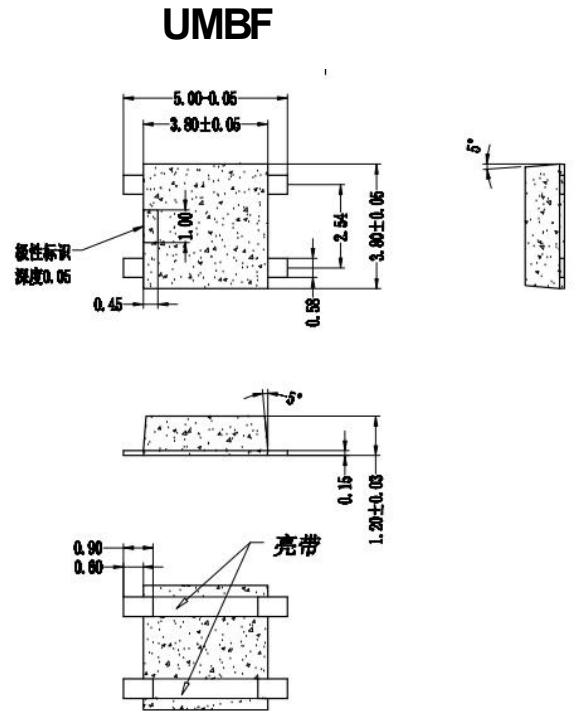


## Features

- Low profile space
- Ideal for automated placement
- Glass passivated chip junction
- Low forward voltage drop
- Low leakage current
- High forward surge capability
- High temperature soldering :  
260°C/10 seconds at terminals

## Mechanical Data

- **Case:** UMBF Molded plastic over glass passivated chip
- **Terminals:** Solder plated, solderable per J-STD-002B and JESD22-B102D
- **Polarity:** Polarity symbols marked on body



Dimiensions in inches and (millimeters)

## Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single Phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Items	Symbol	UMB05F	UMB1F	UMB2F	UMB4F	UMB6F	UMB8F	UMB10F	UNIT
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum average forward rectified current at $T_A=50^\circ\text{C}$ -on glass-epoxy P.C.B <sup>(1)</sup> - at $T_A=30^\circ\text{C}$ on aluminum substrate <sup>(2)</sup>	$I_{F(AV)}$	0.5 0.8							A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	20							A
Thermal resistance from junction to ambient per leg	$R_{\theta JA}^{(1)}$ $R_{\theta JA}^{(2)}$	100 80							°C/W
Thermal resistance from junction to lead per leg <sup>(1)</sup>	$R_{\theta JL}$	30							°C/W
Operating junction and storage temperature range	$T_J, T_{STG}$	-55 to +150							°C

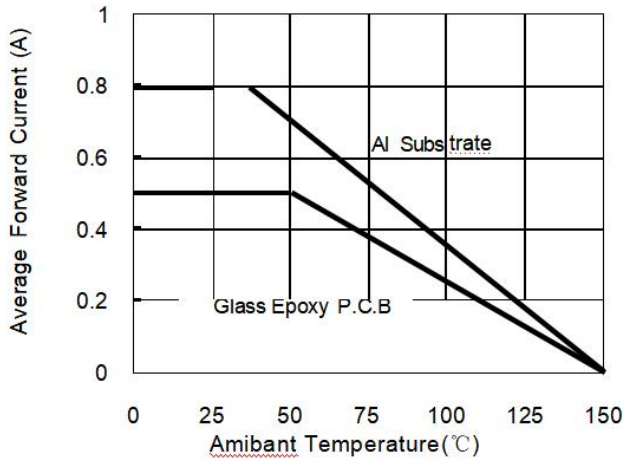
Note:1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

2. Thermal resistance from junction to ambient and from junction to lead mounted on

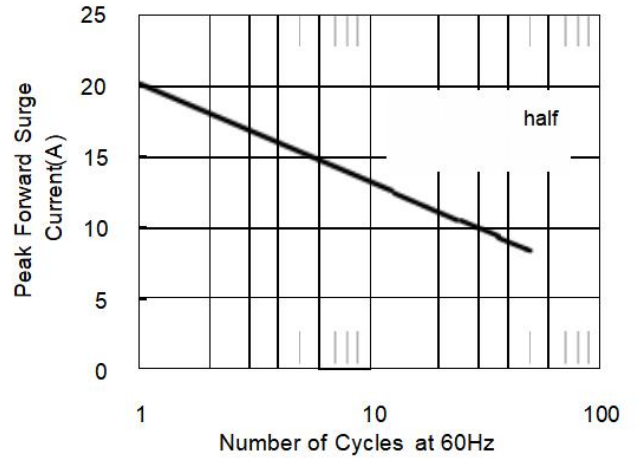
P.C.B with 0.5×0.5"(13×13mm)copper pads.



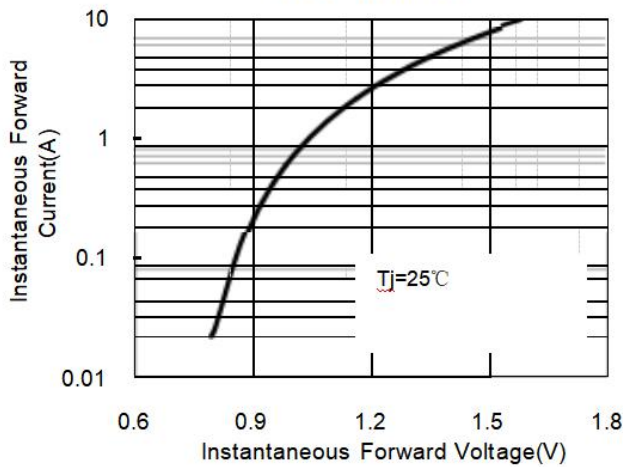
**Fig.1 Forward Current Derating Curve**



**Fig.2 Maximum Non-Repetitive Peak Forward Surge Current**



**Fig.3 Typical Instantaneous Forward Characteristics**



**Fig.4 Typical Reverse Leakage Characteristics**

