

# TD21M THRU TD210M-HAF

## Surface Mount Bridge Rectifier

Reverse Voltage - 100 to 1000 V

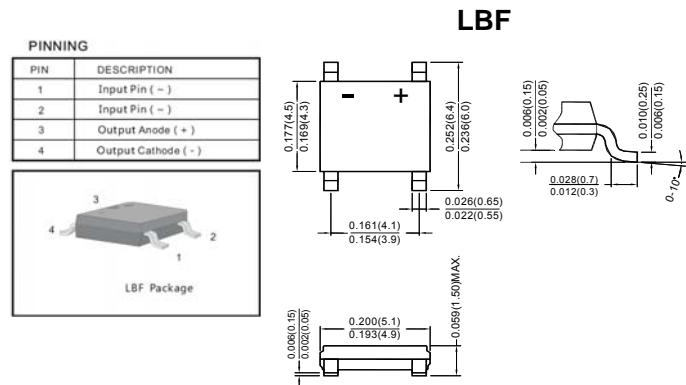
Forward Current - 2 A

### Features

- Designed for Surface Mount Application
- Glass passivated chip
- High Surge Current Capability
- Small size, simple installation
- Halogen and Antimony Free(HAF), RoHS compliant

### Mechanical Data

- **Package:** LBF
- **Polarity:** Polarity symbol marked on body



### Maximum Ratings and Electrical characteristics

Rating at 25°C ambient temperature unless otherwise specified, single phase, half-wave, 60 Hz, resistive or inductive load, for capacitive load derate current by 20 %.

Parameter	Symbols	TD21M	TD22M	TD24M	TD26M	TD28M	TD210M	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	100	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	100	200	400	600	800	1000	V
Maximum Average Forward Current at $T_a = 40^\circ\text{C}$	$I_{F(AV)}$	2						A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	$I_{FSM}$	50						A
Maximum Instantaneous Forward Voltage at Forward Current 2 A	$V_F$	1						V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_a = 25^\circ\text{C}$ $T_a = 125^\circ\text{C}$	$I_R$	5 500						$\mu\text{A}$
Typical Junction Capacitance <sup>1)</sup>	$C_j$	25						pF
Typical Thermal Resistance <sup>2)</sup>	$R_{\theta JA}$	80						$^\circ\text{C/W}$
Operating and Storage Temperature Range	$T_j, T_{stg}$	- 55 to + 150						$^\circ\text{C}$

<sup>1)</sup> Measured at 1MHz and applied reverse voltage of 4 V D.C.

<sup>2)</sup> Mounted on glass epoxy PC board with 4 x 2.54 mm copper pad.

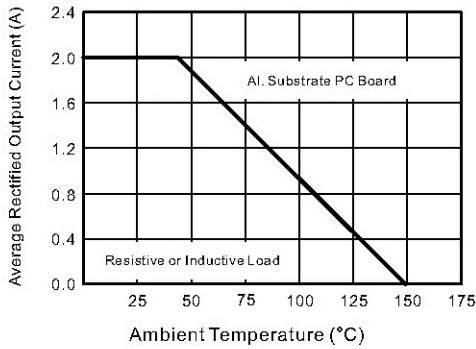
**TOP DYNAMIC**



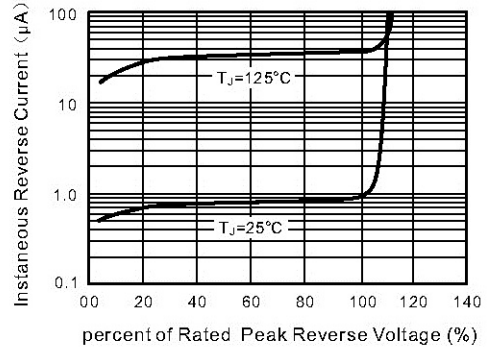
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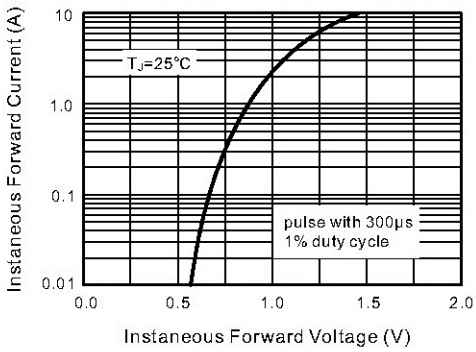
**Fig.1 Average Rectified Output Current Derating Curve**



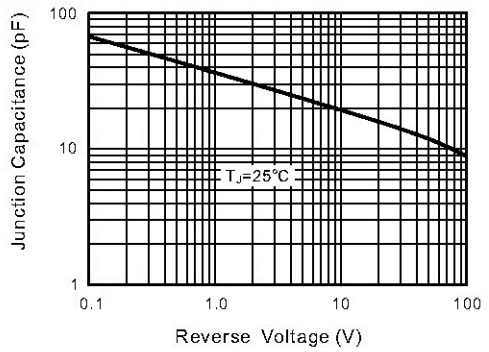
**Fig.2 Typical Reverse Characteristics**



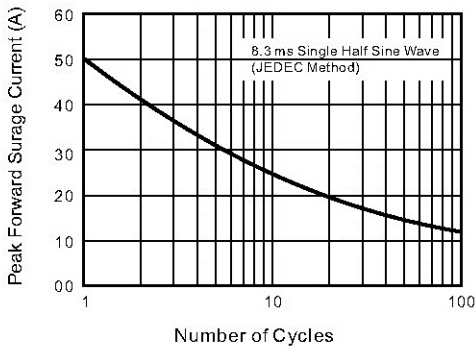
**Fig.3 Typical Instantaneous Forward Characteristics**



**Fig.4 Typical Junction Capacitance**



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



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ISO14001 : 2004 Certificate No. 121505007  
 ISO 9001 : 2008 Certificate No. 50114012  
 OHSAS 18001 : 2007 Certificate No. 0513150006  
 IECQ QC 080000 Certificate No. E24H100071A1M2

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