

TD01F10M THRU TD10F10M-HAF

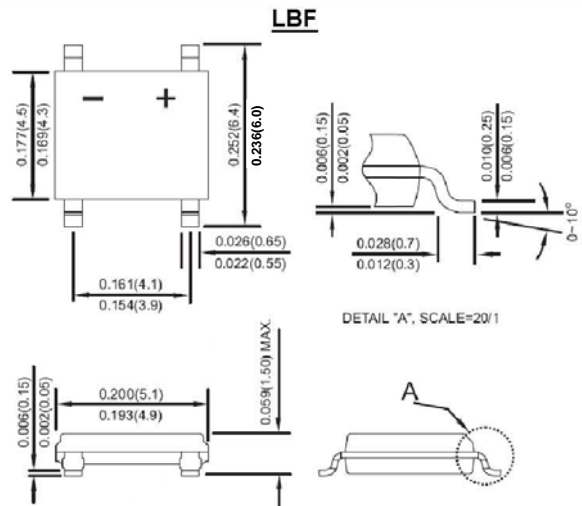
Surface Mount Fast Recovery Bridge Rectifier
Reverse Voltage - 100 to 1000 V
Forward Current - 1 A

Features

- Glass Passivated Chip Junction
- Fast reverse recovery time
- Halogen and Antimony Free(HAF), RoHS compliant

Mechanical Data

- Package: LBF
- Terminals: Solderable per MIL-STD-750, Method 2026



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical characteristics

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

Parameter	Symbols	TD01F10M	TD02F10M	TD04F10M	TD06F10M	TD08F10M	TD10F10M	Units
	Marking	F10T01	F10T02	F10T04	F10T06	F10T08	F10T10	-
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
Average Rectified Output Current $T_a = 75^\circ\text{C}$	I_O	1						A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	35						A
Maximum Instantaneous Forward Voltage at 1 A	V_F	1.3						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 50						μA
Typical Junction Capacitance ¹⁾	C_j	13						pF
Typical Thermal Resistance ²⁾	$R_{\theta JA}$	85						$^\circ\text{C}/\text{W}$
Maximum Reverse Recovery Time ³⁾	t_{rr}	500						ns
Operating and Storage Temperature Range	T_j, T_{stg}	- 55 to + 150						$^\circ\text{C}$

¹⁾ Measured at 1 MHz and applied reverse voltage of 4 V D.C.

²⁾ Mounted on glass epoxy PC board with 4 X (5 X 5 mm²) copper pad.

³⁾ Measured with $I_F = 0.5 \text{ A}$, $I_R = 1 \text{ A}$, $I_{rr} = 0.25 \text{ A}$.

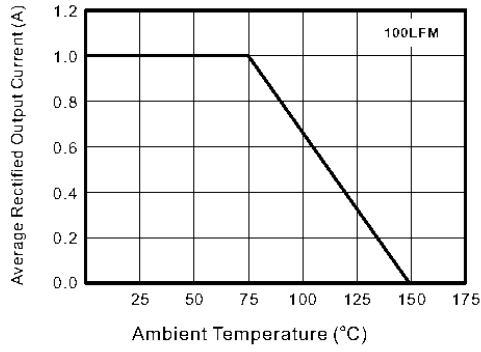
TOP DYNAMIC



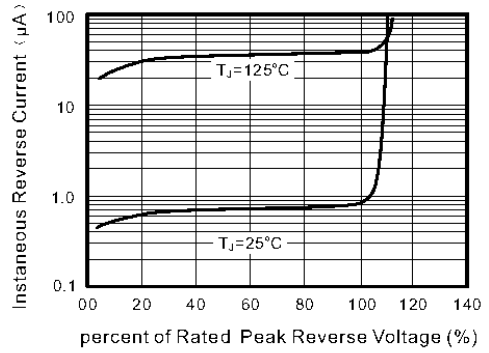
Dated: 29/02/2016 JD Rev: 02

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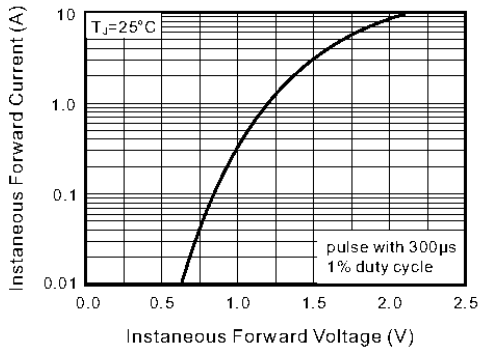
Average Rectified Output Current Derating Curve



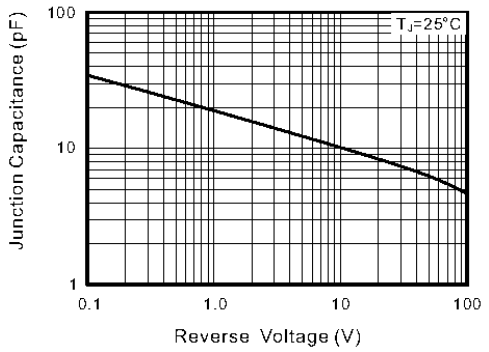
Typical Reverse Characteristics



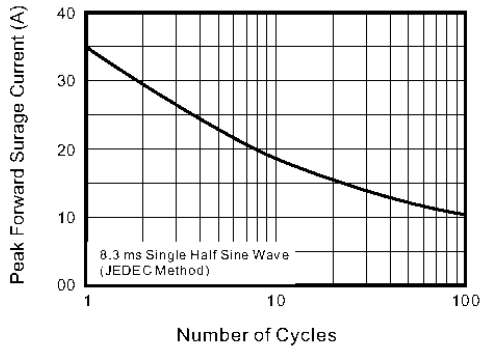
Typical Instantaneous Forward Characteristics



Typical Junction Capacitance



Maximum Non-Repetitive Peak Forward Surge Current



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