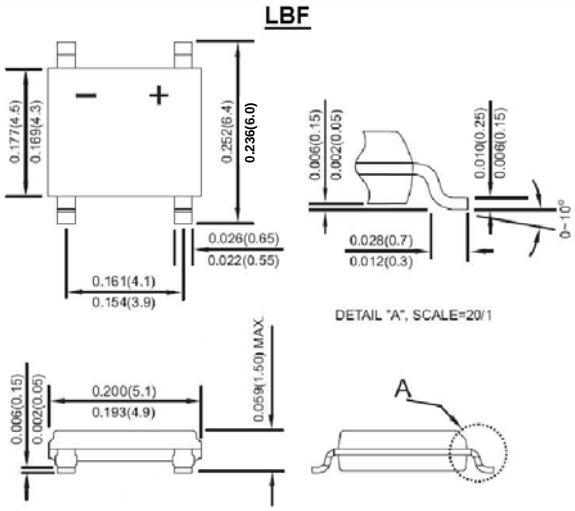
TD01F10M THRU TD10F10M

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



Dimensions in inches and (millimeters)

Features
- Glass Passivated Chip Junction
- Fast reverse recovery time

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

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 %.

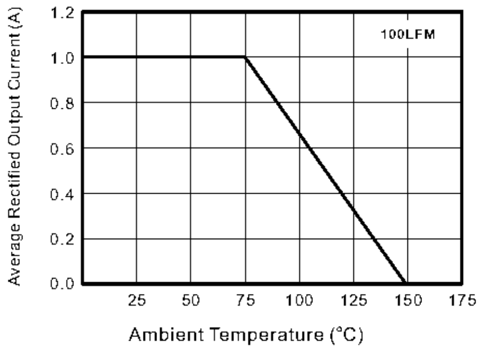
Parameter	Symbols	TD01F10M	TD02F10M	TD04F10M	TD06F10M	TD08F10M	TD10F10M	Units
	Marking	F10T01	F10T02	F10T04	F10T06	F10T08	F10T10	-
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	100	200	400	600	800	1000	V
Average Rectifiled Output Current T_a = 75°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 T_a = 25 °C Rated DC Blocking Voltage T_a = 125 °C	I_R	5 50						μA
Typical Junction Capacitance [1]	C_j	13						pF
Typical Thermal Resistance [2]	$R_{\theta JA}$	85						°C/W
Maximum Reverse Recovery Time [3]	t_{rr}	500						ns
Operating and Storage Temperature Range	T_j, T_{stg}	- 55 to + 150						°C

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

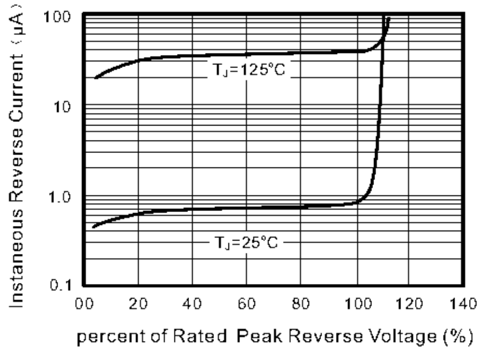
[2] Mounted on glass epoxy PC board with 4 x (5 x 5 mm^2) copper pad.

[3] Measured with I_F = 0.5 A, I_R = 1 A, I_{rr} = 0.25 A.

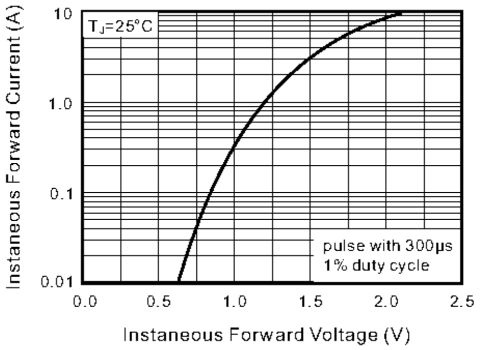
Average Rectified Output Current Derating Curve



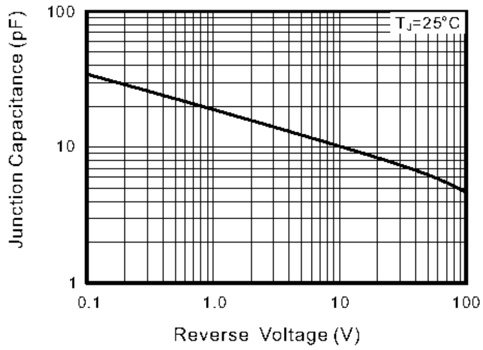
Typical Reverse Characteristics



Typical Instaneous Forward Characteristics



Typical Junction Capacitance



Maximum Non-Repetitive Peak Forward Surage Current