

# TD01FL10 THRU TD10FL10-HAF

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

## Features

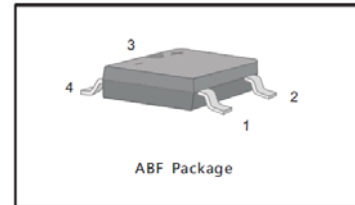
- Glass Passivated Chip Junction
- Fast reverse recovery time
- Halogen and Antimony Free(HAF), RoHS compliant

## Mechanical Data

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

## PINNING

PIN	DESCRIPTION
1	Input Pin ( ~ )
2	Input Pin ( ~ )
3	Output Anode ( + )
4	Output Cathode ( - )



## 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	TD01FL10	TD02FL10	TD04FL10	TD06FL10	TD08FL10	TD10FL10	Units
	Marking	F10FL01	F10FL02	F10FL04	F10FL06	F10FL08	F10FL10	-
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	$V_F$	1.1						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 50						$\mu\text{A}$
Typical Junction Capacitance <sup>1)</sup>	$C_j$	30						pF
Maximum Reverse Recovery Time <sup>2)</sup>	$t_{rr}$	500						ns
Operating and Storage Temperature Range	$T_j, T_{stg}$	- 55 to + 150						$^\circ\text{C}$

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

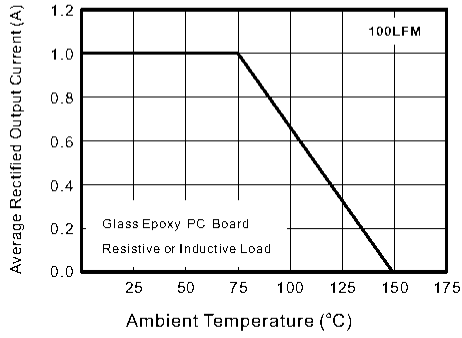
<sup>2)</sup> Measured with  $I_F = 0.5\text{ A}$ ,  $I_R = 1\text{ A}$ ,  $I_{rr} = 0.25\text{ A}$ .

**TOP DYNAMIC**

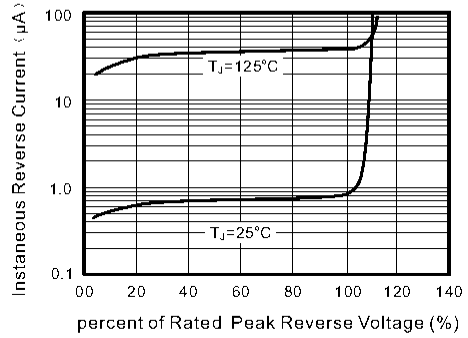


# TD01FL10 THRU TD10FL10-HAF

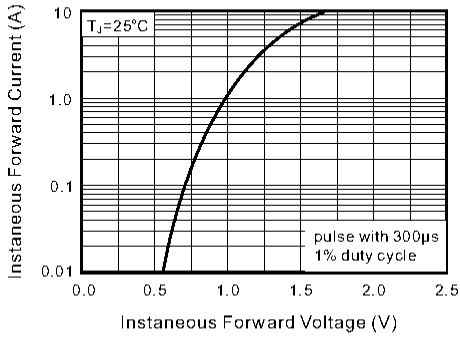
**Average Rectified Output Current Derating Curve**



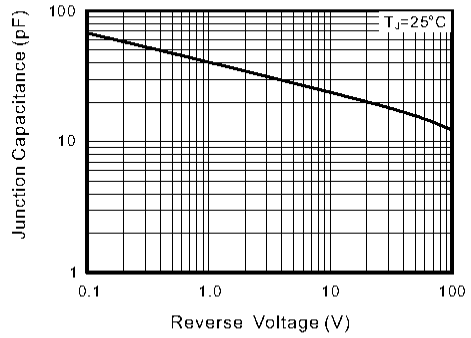
**Typical Reverse Characteristics**



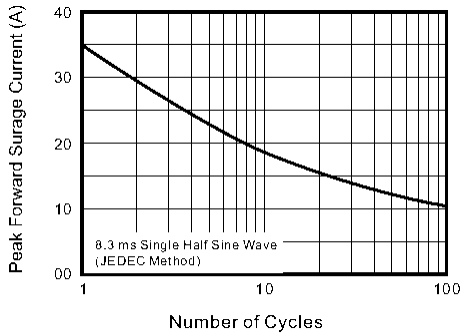
**Typical Instantaneous Forward Characteristics**



**Typical Junction Capacitance**



**Maximum Non-Repetitive Peak Forward Surge Current**



**TOP DYNAMIC**



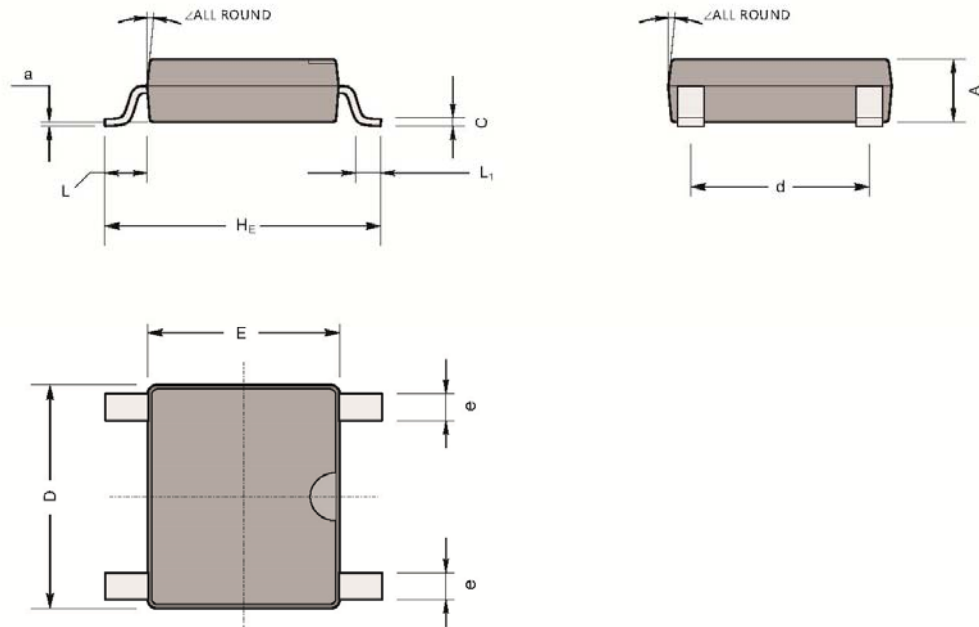
ISO14001 : 2004 Certificate No. 121505007  
 ISO 9001 : 2008 Certificate No. 03144012  
 OHSAS 18001 : 2007 Certificate No. 0613160606  
 IECQ QC 080000 Certificate No. E24W0011A02

# TD01FL10 THRU TD10FL10-HAF

## PACKAGE OUTLINE

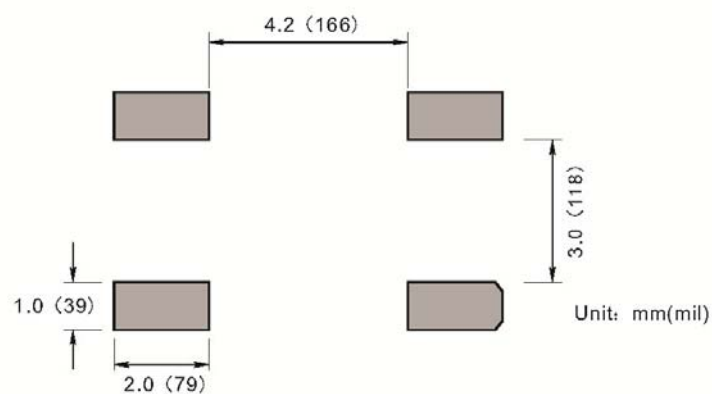
ABF

Plastic surface mounted package; 4 leads



UNIT	A	C	D	E	HE	d	e	L	L1	a	∠
mm	1.2	0.22	5.2	4.5	6.4	4.2	0.7	0.95	0.6	0.1	7°
	1	0.15	4.9	4.2	6	3.8	0.5				

## Recommended Soldering Footprint



**TOP DYNAMIC**



Dated: 26/12/2015 JD Rev: 02