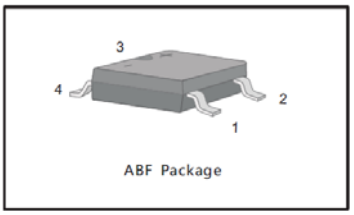
TD01FL10 THRU TD10FL10

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

PINNING

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



ABF Package

Features
- Glass Passivated Chip Junction
- Fast reverse recovery time

Mechanical Data
- Package: ABF
- 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 T_a = 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 Rectifiled Output Current T_a = 125°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	30						pF
Maximum Reverse Recovery Time [2]	t_{rr}	500						ns
Thermal Resistance from Junction to Ambient Air [3]	R_{QJA}	75						°C/W
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] Measured with I_F = 0.5 A, I_R = 1 A, I_{rr} = 0.25 A.

[3] Mounted on glass epoxy PC board with 4×1.5"×1.5"（3.81×3.81 cm）copper pad.

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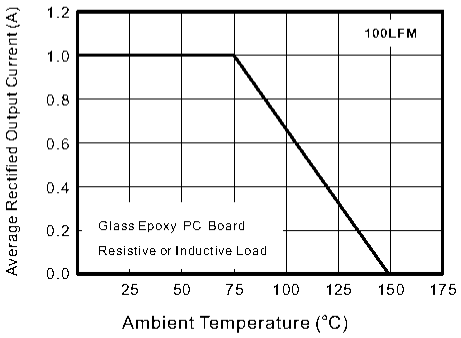
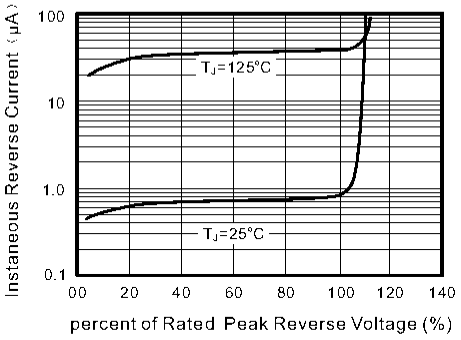
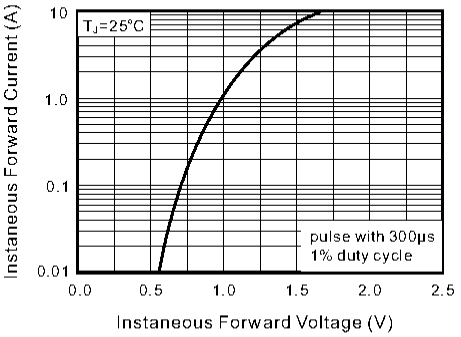
Average Rectified Output Current
Derating Curve



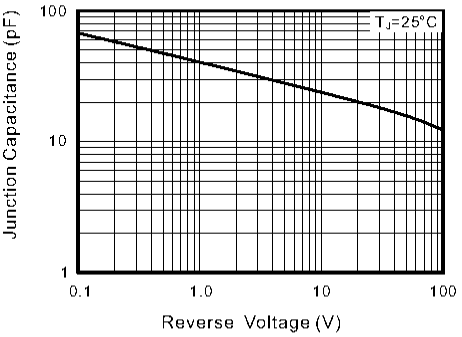
Typical Reverse Characteristics



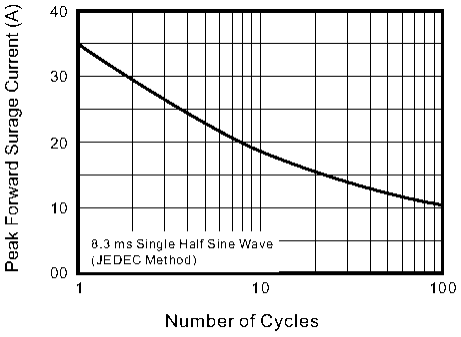
Typical Instaneous Forward
Characteristics



Typical Junction Capacitance



Maximum Non-Repetitive Peak
Forward Surage Current



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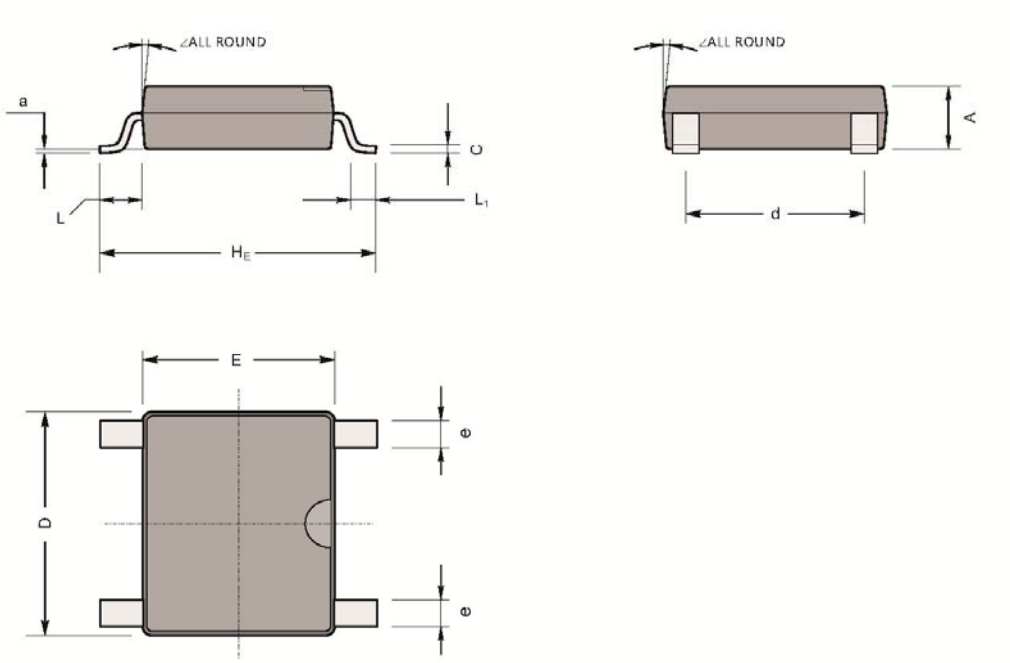
PACKAGE OUTLINE ABF

Plastic surface mounted package; 4 leads



UNIT	A	C	D	E	H_E	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