

TD01F15 THRU TD10F15

Surface Mount Fast Recovery Bridge Rectifier

Reverse Voltage - 100 to 1000 V

Forward Current - 1.5 A

Features

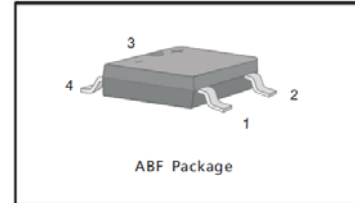
- Glass Passivated Chip Junction
- High Surge Current Capability

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 (-)



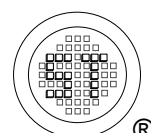
Maximum Ratings and Electrical characteristics

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	TD01F15	TD02F15	TD04F15	TD06F15	TD08F15	TD10F15	Units
	Marking	F15FL01	F15FL02	F15FL04	F15FL06	F15FL08	F15FL10	-
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 Forward Current $T_a = 50^\circ\text{C}$	$I_{F(AV)}$	1.5						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 1.5 A	V_F	1.1						V
Maximum DC Reverse Current at $T_a = 25^\circ\text{C}$ Rated DC Blocking Voltage $T_a = 125^\circ\text{C}$	I_R	5 50						μA
Typical Junction Capacitance ¹⁾	C_j	30						pF
Maximum Reverse Recovery Time ²⁾	t_{rr}	500						ns
Operating and Storage Temperature Range	T_j, T_{stg}	- 55 to + 150						$^\circ\text{C}$

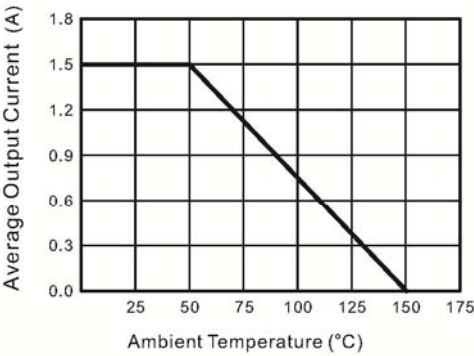
¹⁾ Measured at 1 MHz and applied reverse voltage of 4 V D.C.

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

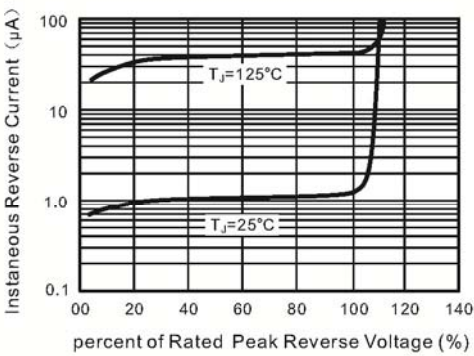


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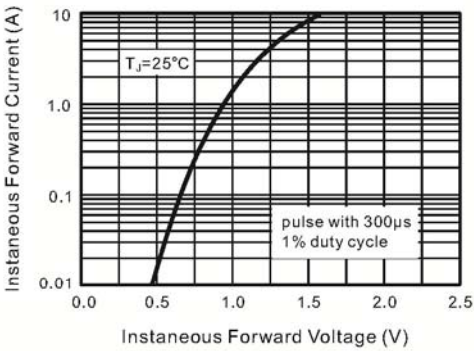
Forward Current Derating Curve



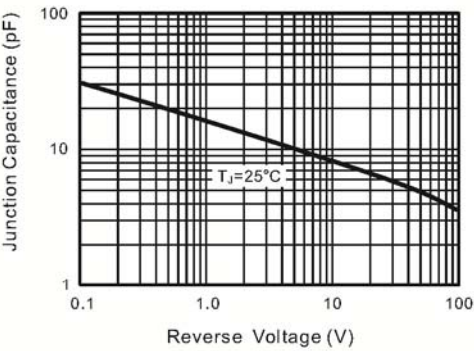
Typical Reverse Characteristics



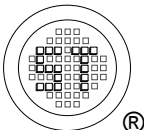
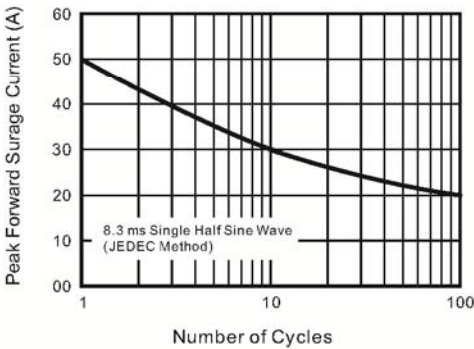
Typical Instantaneous Forward Characteristics



Typical Junction Capacitance



Maximum Non-Repetitive Peak Forward Surge Current

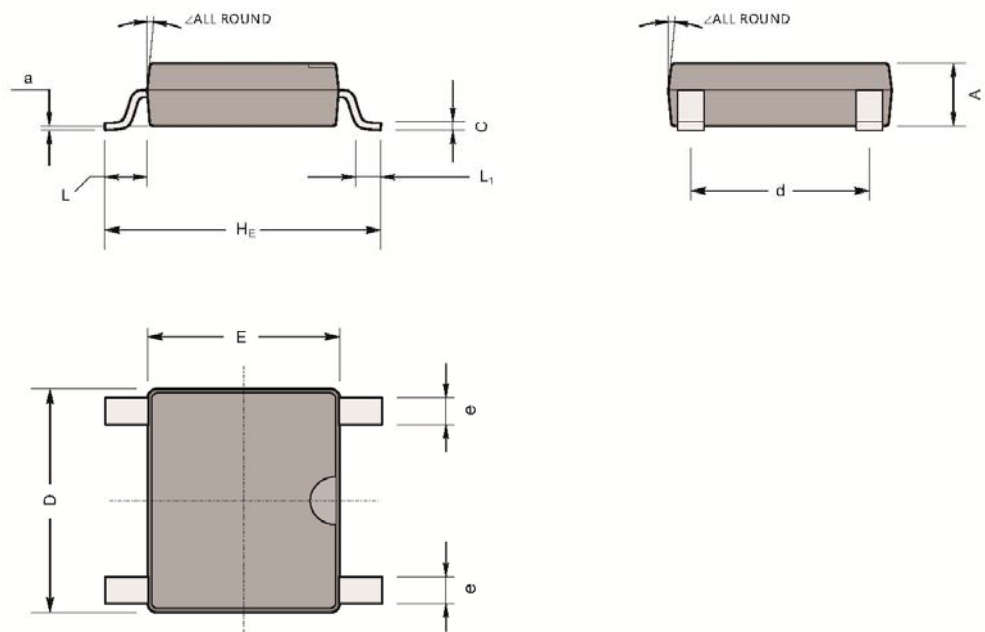


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PACKAGE OUTLINE

ABF

Plastic surface mounted package; 4 leads



UNIT	A	C	D	E	H_E	d	e	L	L1	a	$\angle$
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	3.6	0.5				

Recommended Soldering Footprint

