

TD1F THRU TD10F-HAF

Surface Mount Glass passivated Bridge Rectifier
Reverse Voltage - 100 to 1000 V
Forward Current - 1 A

Features

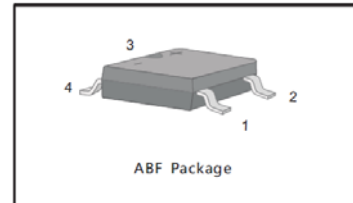
- Glass passivated chip
- High Surge Current Capability
- Designed for Surface Mount Application
- Halogen and Antimony Free(HAF), RoHS compliant

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	TD1F	TD2F	TD4F	TD6F	TD8F	TD10F	Units
	Marking	10F1	10F2	10F4	10F6	10F8	10F10	-
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 at $T_a = 50^\circ\text{C}$	$I_{F(AV)}$	1						A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load(JEDEC Method)	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	I_R	5 50						μA
Typical Junction Capacitance ¹⁾	C_j	13						pF
Typical Thermal Resistance ²⁾	$R_{\theta JA}$ $R_{\theta JL}$	80 20						$^\circ\text{C/W}$
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.

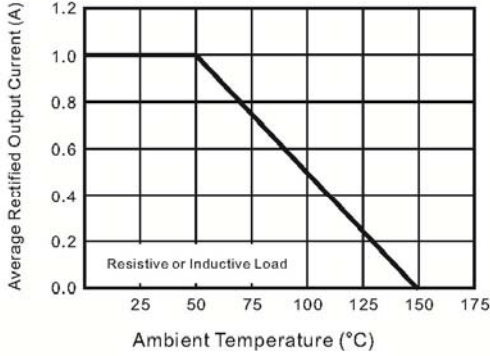
²⁾ Mounted on glass epoxy PC board with 4 X (5 X 5 mm²) copper pad.

TOP DYNAMIC

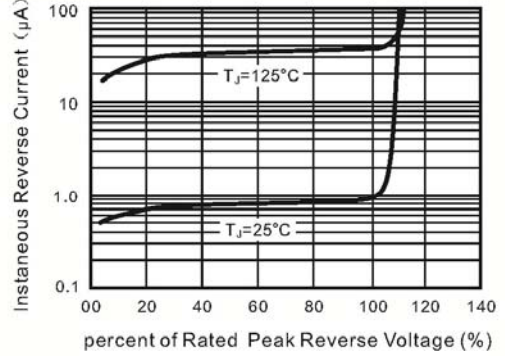


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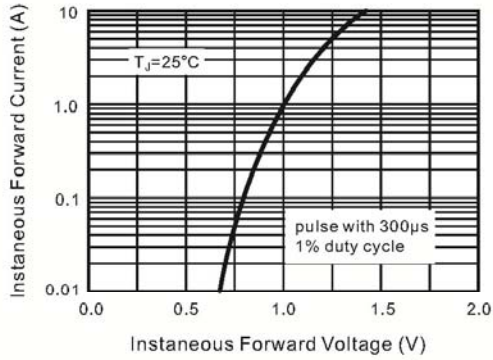
Average Rectified Output Current Derating Curve



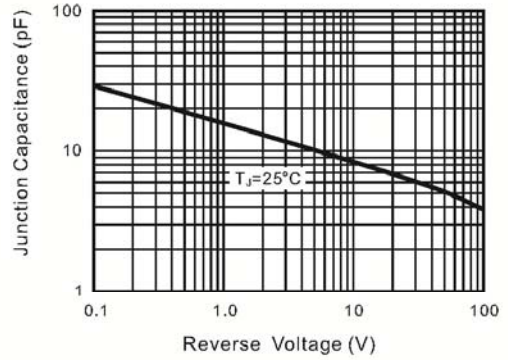
Typical Reverse Characteristics



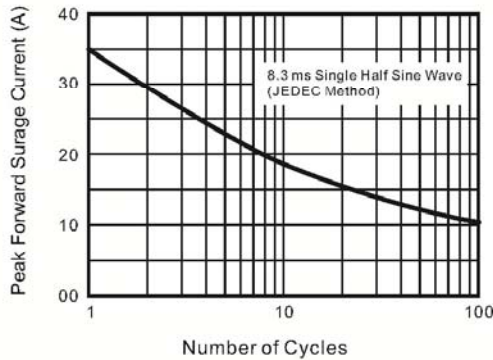
Typical Instantaneous Forward Characteristics



Typical Junction Capacitance



Maximum Non-Repetitive Peak Forward Surge Current



TOP DYNAMIC

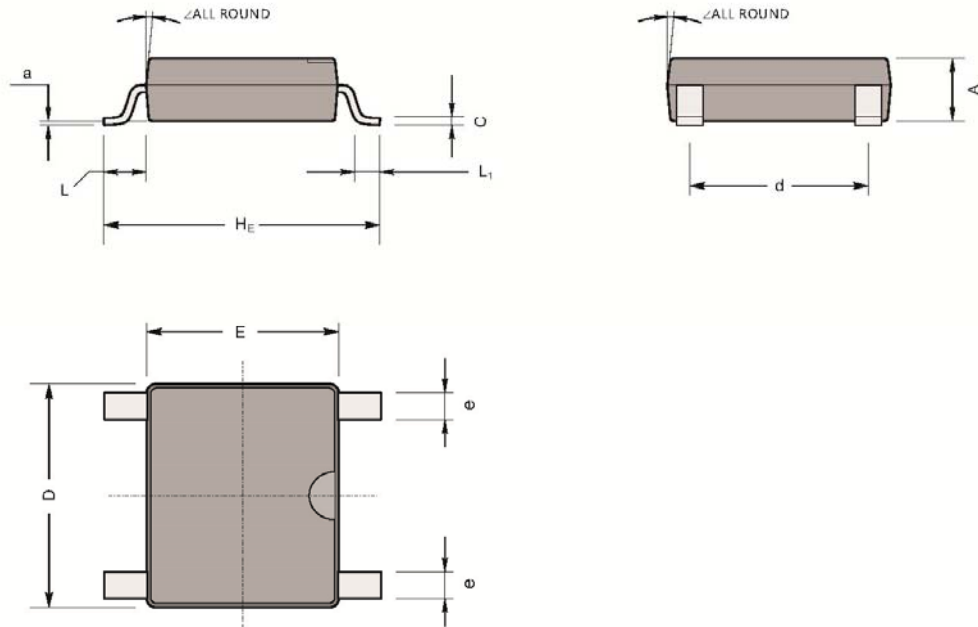


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PACKAGE OUTLINE

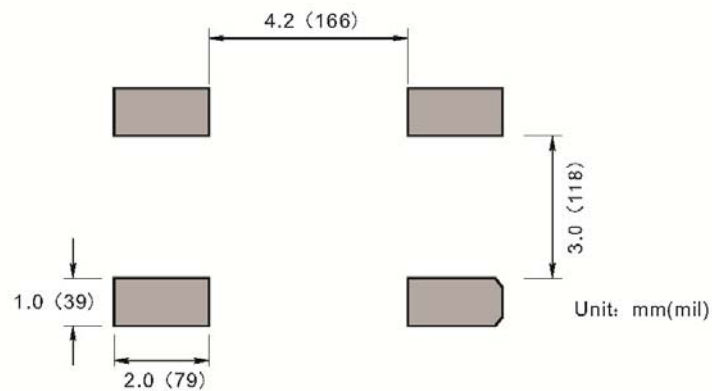
ABF

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	3.6	0.5				

Recommended Soldering Footprint



TOP DYNAMIC

