

# TD21F THRU TD210F

## Surface Mount Glass passivated Bridge Rectifier

Reverse Voltage - 100 to 1000 V

Forward Current - 2 A

### Features

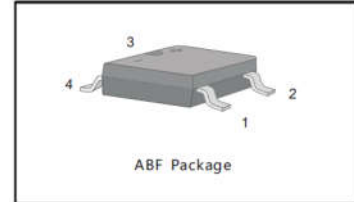
- Glass Passivated Chip Junction
- High Surge Current Capability
- Designed for Surface Mount Application

### 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	TD21F	TD22F	TD24F	TD26F	TD28F	TD210F	Units
	Marking	TD21F	TD22F	TD24F	TD26F	TD28F	TD210F	-
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 $T_L = 100^\circ\text{C}$	$I_{F(AV)}$	2						A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	$I_{FSM}$	60						A
$I^2t$ Rating for fusing( $t = 8.3 \text{ mS}$ )	$I^2t$	14.9						$\text{A}^2\text{S}$
Maximum Instantaneous Forward Voltage at 2 A	$V_F$	1.1						V
Maximum DC Reverse Current at $T_a = 25^\circ\text{C}$ Rated DC Blocking Voltage $T_a = 125^\circ\text{C}$	$I_R$	5 100						$\mu\text{A}$
Typical Junction Capacitance <sup>1)</sup>	$C_j$	30						pF
Typical Thermal Resistance <sup>2)</sup>	$R_{\theta JA}$ $R_{\theta JL}$	65 16						$^\circ\text{C/W}$
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> Mounted on glass epoxy PC board with 4 X (5 X 5 mm<sup>2</sup>) copper pad.

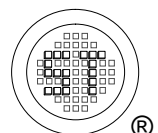


Fig.1 Average Rectified Output Current Derating Curve

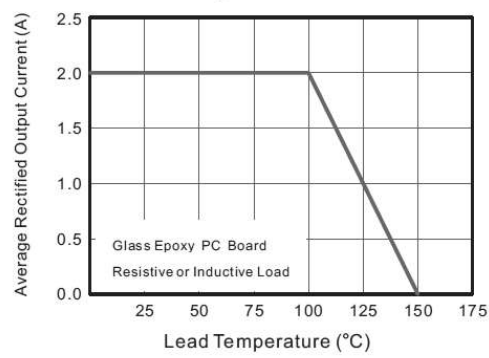


Fig.2 Typical Reverse Characteristics

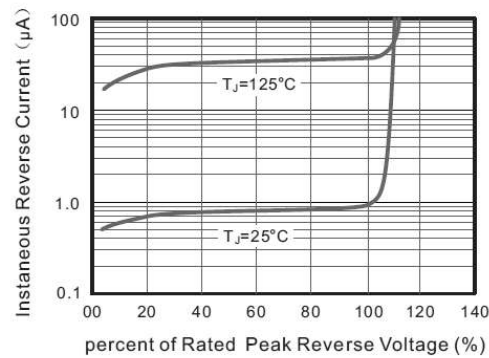


Fig.3 Typical Instantaneous Forward Characteristics

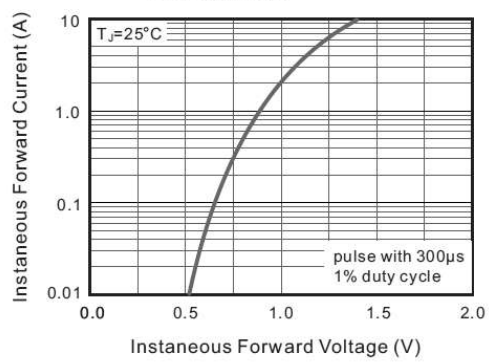
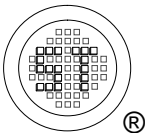
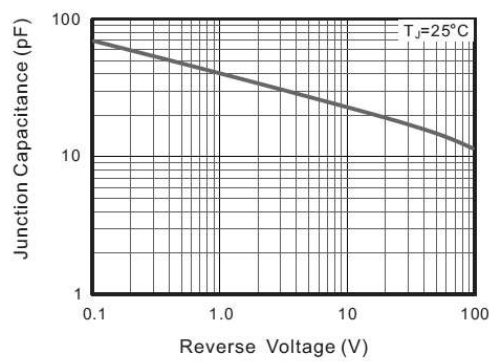


Fig.4 Typical Junction Capacitance

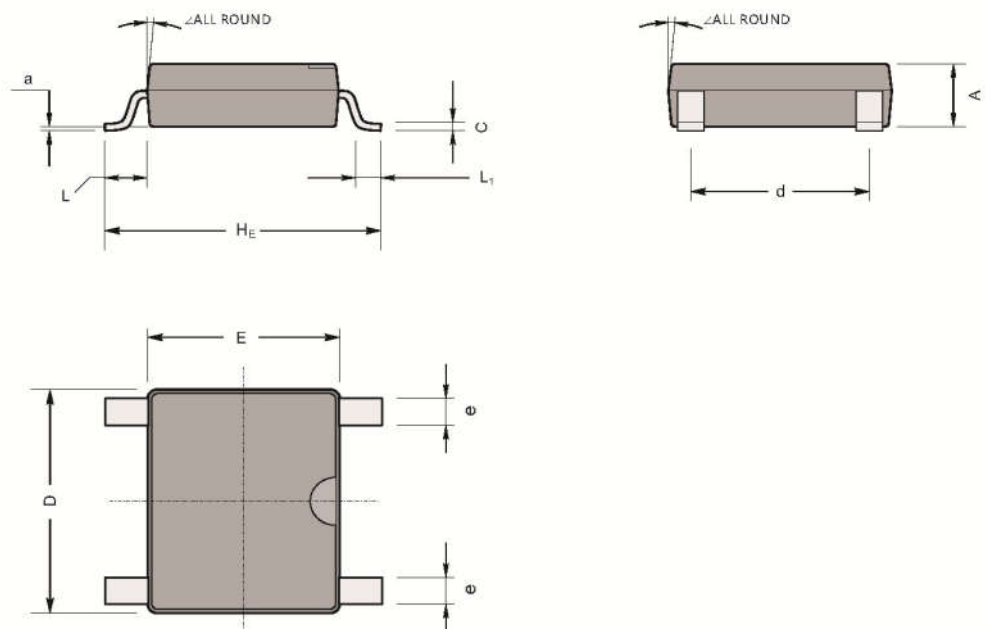


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PACKAGE OUTLINE

ABF

Plastic surface mounted package; 4 leads



UNIT	A	C	D	E	H <sub>E</sub>	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

