

TD21F THRU TD210F

Surface Mount Glass passivated Bridge Rectifier Reverse Voltage - 100 to 1000 V Forward Current - 2 A

Features

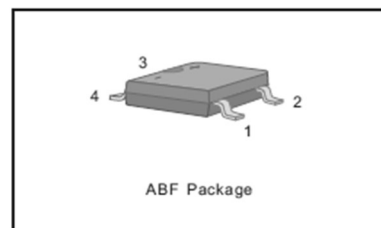
- Glass Passivated Chip Junction
- High Surge Current Capability
- Designed for Surface Mount Application

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 (-)



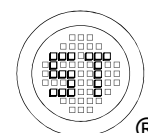
Maximum Ratings and Electrical characteristics

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 Output Current	$I_{F(AV)}$	2						A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	60						A
I^2t Rating for fusing(t = 8.3 mS)	I^2t	14.9						A ² S
Maximum Instantaneous Forward Voltage at 2 A	V_F	1.1						V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	5 100						μ A
Typical Junction Capacitance ¹⁾	C_j	30						pF
Typical Thermal Resistance ²⁾	$R_{\theta JA}$ $R_{\theta JC}$	65 16						°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⁾ Mounted on glass epoxy PC board with 4×1.5"×1.5" (3.81×3.81 cm) copper pad.



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Electrical Characteristics Curves

Fig.1 Average Rectified Output Current Derating Curve

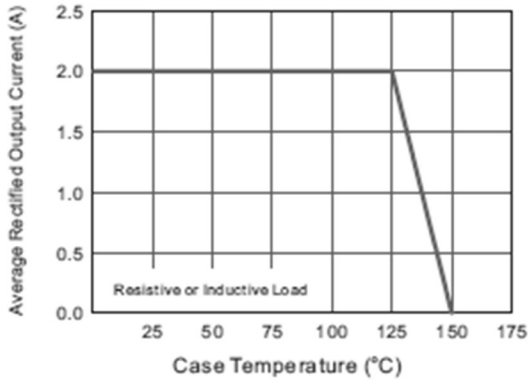


Fig.2 Typical Reverse Characteristics

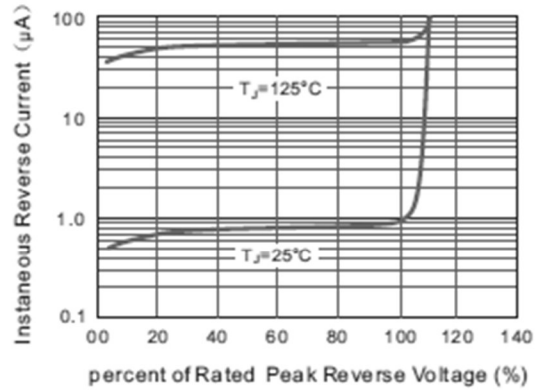


Fig.3 Typical Instantaneous Forward Characteristics

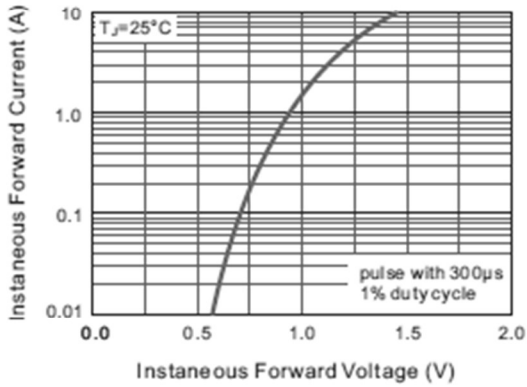


Fig.4 Typical Junction Capacitance

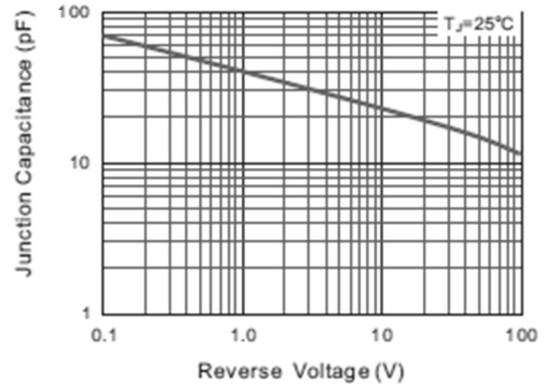


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

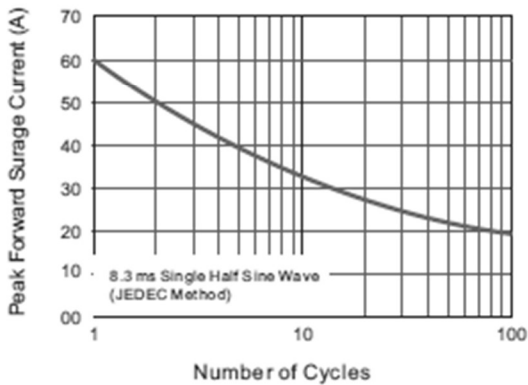
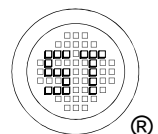
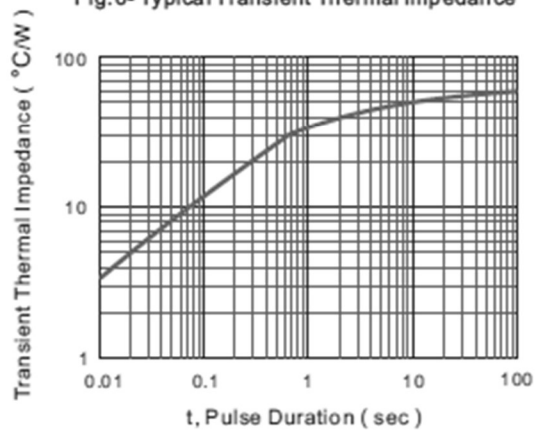


Fig.6- Typical Transient Thermal Impedance

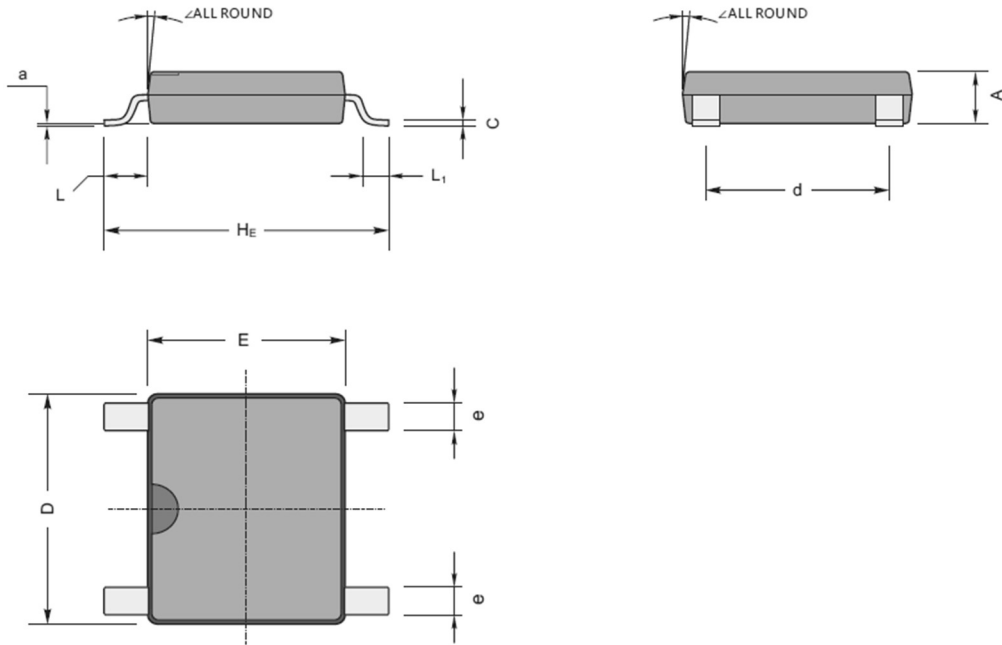


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PACKAGE OUTLINE

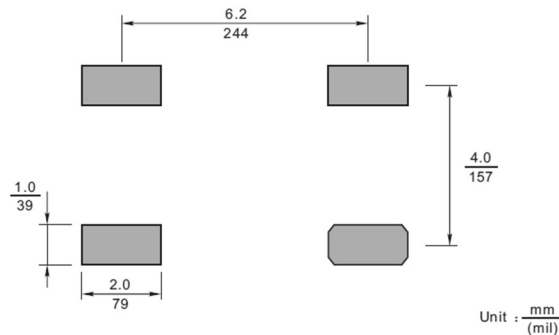
ABF

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	0.2	7°
	1	0.15	4.9	4.2	6	3.8	0.5				

Recommended Soldering Footprint



Marking information

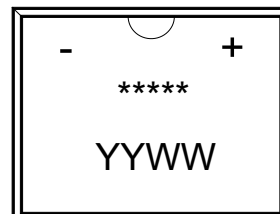
"*****" = Part No.

"YYWW" = Date Code Marking

"Y" = Year (ex:21 = 2021)

"W" = Week (ex:09 = the 9th week of the year)

Font type: Arial



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