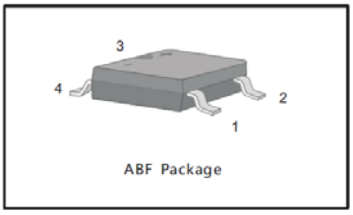
TD151F THRU TD1510F

Surface Mount Glass passivated Bridge Rectifier
Reverse Voltage - 100 to 1000 V
Forward Current - 1.5 A

PINNING

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



ABF Package

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

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	TD151F	TD152F	TD154F	TD156F	TD158F	TD1510F	Units
	Marking	15F1	15F2	15F4	15F6	15F8	15F10	-
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°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 °C Rated DC Blocking Voltage T_a = 125 °C	I_R	5 100						μA
Typical Junction Capacitance [1]	C_j	25						pF
Typical Thermal Resistance [2]	$R_{\theta JA}$ $R_{\theta JL}$	60 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 X (5 X 5 mm^2) copper pad.

Fig.1 Average Rectified Output Current Derating Curve

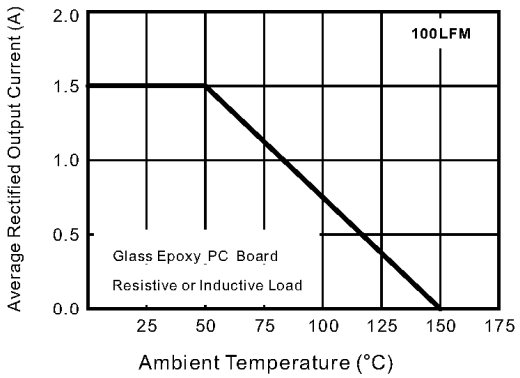


Fig.2 Typical Reverse Characteristics

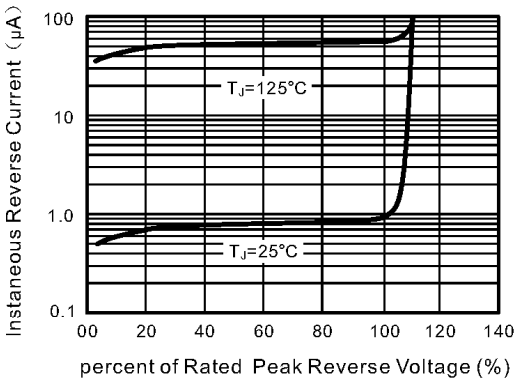


Fig.3 Typical Instaneous Forward Characteristics

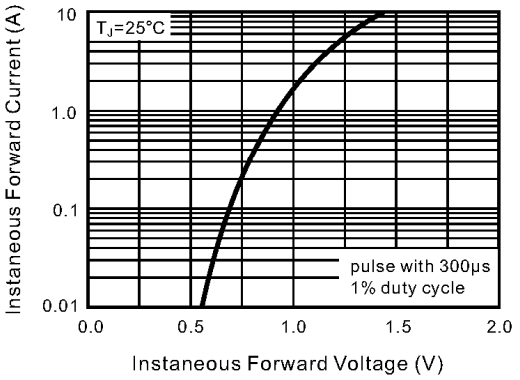


Fig.4 Typical Junction Capacitance

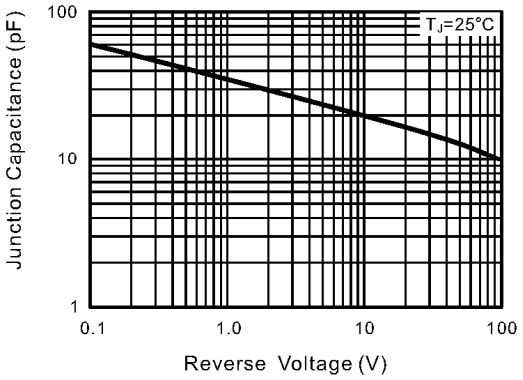
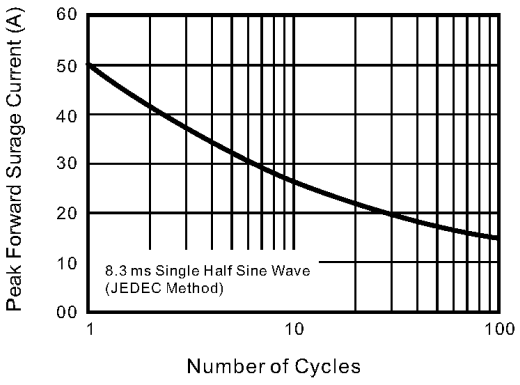


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current



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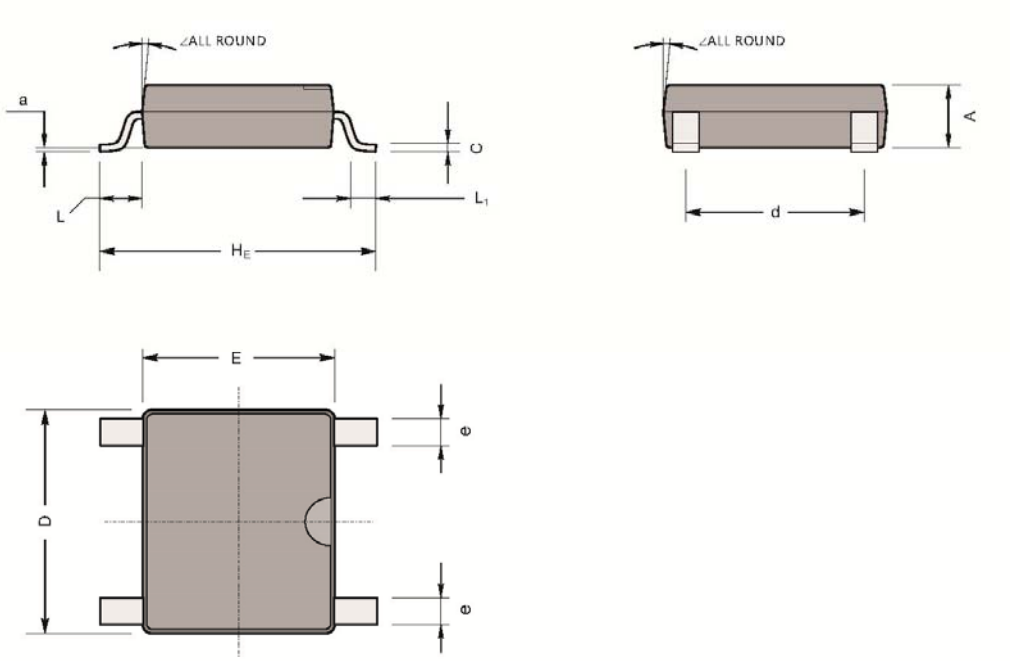
PACKAGE OUTLINE ABF

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	3.6	0.5				

Recommended Soldering Footprint