

DF15005 THRU DF1510

Glass Passivated Bridge Rectifiers

Features

- Glass passivated chip
- High surge forward current capability
- Reliable low cost construction utilizing molded plastic technique
- Lead tin plated copper
- Meet UL flammability classification 94V-0

Mechanical Data

- Polarity: Symbol marked on body
- Mounting position: Any

or har Note: Products with logo

are made by HY Electronic (Cayman) Limited.

Applications

 General purpose use in AC/DC bridge full wave rectification, for SMPS, lighting ballaster, adapter, etc.

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Characteristics	Symbol	DF	DF	DF	DF	DF	DF	DF	Unit
	Symbol	15005	1501	1502	1504	1506	1508	1510	
Maximum Repetitive Peak Reverse Voltage	Vrrm	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	Vrms	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @Ta=40 $^\circ C$ (Note1)	l(AV)	1.5							А
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave,	IFSM	50							А
Superimposed on Rated Load (JEDEC Method)	IF SM								
I ² t Rating for Fusing (t<8.3mS)	l ² t	10.4							A ² s
Peak Forward Voltage per Diode at 1.5A DC	Vf	1.1							V
Maximum DC Reverse Current at Rated @Tj=25 $^\circ\!\!\mathbb{C}$	lĸ	10							μA
DC Blocking Voltage per Diode @TJ=125°C	IK	500							
Typical Junction Capacitance (Note1)	CJ	25						pF	
Typical Thermal Resistance Junction to Ambient (Note2)	Reja	40						°C/W	
Operating Junction Temperature Range	TJ	-55 to +150							°C
Storage Temperature Range	Тѕтс	-55 to +150							°C

Notes: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.

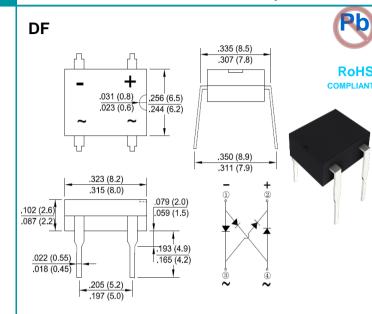
2. Thermal resistance from junction to ambient mounted on P.C.B, with 0.5*0.5"(13*13mm) copper pads.

3. The typical data above is for reference only .

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Reverse Voltage - 50 to 1000 Volts

Forward Current - 1.5 Amperes



Package Outline Dimensions in Inches (Millimeters)

Rating and Characteristic Curves DF15005 THRU DF1510

1.8

1.5

1.2

0.9

0.6

0.3

0

2000

1000

100

10

1

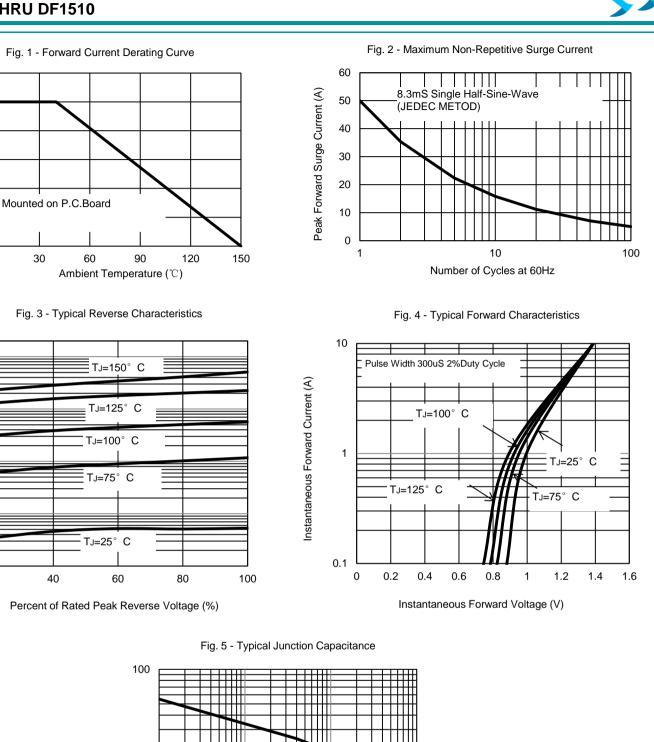
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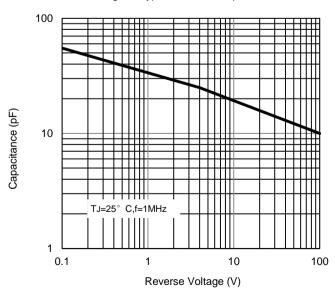
20

Instantaneous Reverse Current (uA)

0

Average Forward Current (A)





The curve above is for reference only.

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ALL specifications and data are subject to be changed without notice to improve reliability function or design or other reasons.

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