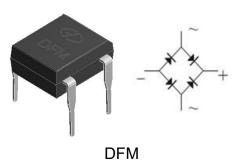


**GOOD-ARK Electronics** 

# Reverse Voltage 200~1000V Forward Current 1.5A

#### **Features**

- •Glass passivated Bridge Rectifiers
- •Ideal for automated placement
- •High surge current capability
- •Moisture sensitivity: level 1, per J-STD-020
- •High temperature soldering guaranteed: 260°C/10 seconds



#### **Typical Applications**

•General purpose use in ac-to dc bridge full wave rectification for SMPS, lighting, adapter, charger, home appliances, office equipment, and telecommunication applications

#### **Mechanical Data**

•Case: DFM,Epoxy meets UL-94V-0 Flammablity rating

•Terminals: Matte tin plated(E3 Suffix) leads, solderable per J-STD-002B and JESD22-B102D

●Polarity : As marked on body

Maximum Ratings (TA = 25 °C unless otherwise noted)							
Parameter	Symbol	DF1502	DF1504	DF1506	DF1508	DF1510	Unit
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	200	400	600	800	1000	V
Maximum RMS voltage	V <sub>RMS</sub>	140	280	420	560	700	V
Maximum DC blocking voltage	V <sub>DC</sub>	200	400	600	800	1000	V
Maximum average forward rectified current	I <sub>F(AV)</sub>	1.5					А
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	50					А
Rating for fusing (t≤8.3ms)	l <sup>2</sup> t	10.4					A <sup>2</sup> s
Operating junction and storage temperature range	T <sub>J</sub> , T <sub>STG</sub>	- 55 to + 150					°C
Typical junction capacitance 4.0 V, 1 MHz	CJ	13.2					pF

# **DF1502 thru DF1510**

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Electrical Characteristics (TA = 25 °C unless otherwise noted)									
Parameter	Test Conditions	Symbol	DF1502	DF1504	DF1506	DF1508	DF1510	Unit	
Maximum instantaneous forward voltage	IF=0.75A		1.0						
	IF=1.5A	V <sub>F</sub>	1.1					Volts	
Maximum DC reverse current at rated DC blocking voltage	TA=25°C				5				
	TA=125°C	I <sub>R</sub>	50					μΑ	
Typical thermal resistance <sup>1)</sup>	juntion to ambient	$R_{\theta JA}$	28						
	juntion to case	R <sub>eJC</sub>	8					°C/W	

Note:1.The thermal resistance from junction to ambient, case or mount, mounted on P.C.B with 13×13mm copper pads, 2 OZ,FR4 PCB

0.3

0

0

25

50

75

Case temperature ( $^{\circ}$ C)

100

125

150

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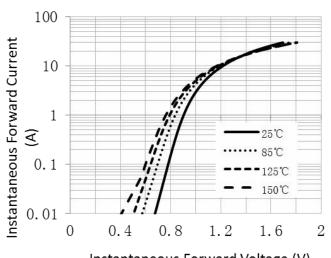
## **Ratings and Characteristics Curves**

(TA = 25°C unless otherwise noted)

**CURRENT** 1.5 **Bridge Output Full Wave** Rectified Current, (A) 1.2 0.9 0.6

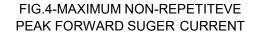
FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED

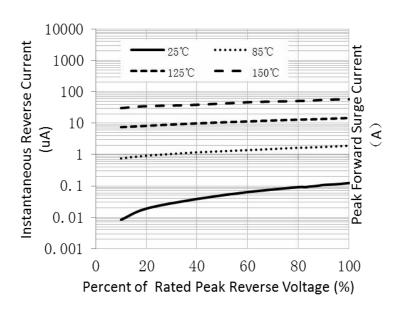
FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISITCS



Instantaneous Forward Voltage (V)

FIG.3-TYPICAL REAK REVERSE VOLTAGE CHARACTERISTICS







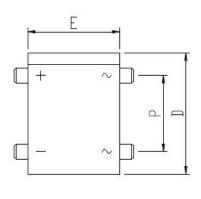


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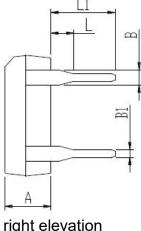
# **Package Outline Dimensions**

in inches (millimeters)

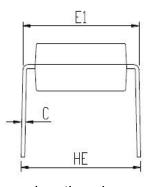
#### First angle projection







right elevation



elevation view

33	unit:mm		unit:inch		
Dim	Min	Max	Min	Max	
Α	3.05	3.30	0.120	0.130	
В	1.02	1.20	0.040	0.047	
B1	0.46	0.58	0.018	0.023	
С	0.22	0.33	0.009	0.013	
D	8.00	8.51	0.315	0.335	
Е	6.20	6.50	0.244	0.256	
E1	7.24	8.00	0.285	0.315	
HE	7.60	8.90	0.299	0.350	
L	1.27	2.03	0.050	0.080	
L1	3.81	4.69	0.150	0.185	
Р	5.00	5.20	0.197	0.205	

## **Revision History**

Document Version	Date of release	Discroption of changes	
Rev.A	2021/3/1	Released Datasheet	
Rev.B	2023/10/17	Modify document format	

### **DF1502 thru DF1510**

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