

DF005 thru DF10 Miniature Glass Passivated Single-Phase Bridge Rectifier Reverse Voltage 50 and 1000V Forward Current 1.0A

Features

Ideal for printed circuit boards Applicable for automative insertion High surge current capability Solder Dip 260 , 40seconds



Mechanical Data

Case:DF

Epoxy meets UL-94V-0 Flammability rating Terminals:Matte tin plated (E3 Suffix) leads, solderable per J-STD-002B and JESD22-B102D Polarity:As marked on body

Typical Applications

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General purpose use in ac-to-dc bridge full wave rectification for SMPS, Lighting Ballaster, Adapter, Battery Charger, Home Appliances, Office Equipment, and Telecommunication applications.



0.255 (6.5) 0.315 (8.00) 0.245 (6.2) 0.285 (7.24)

Maximum Ratings & Electrical Characteristics Ratings at 25

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Parameter	Symbol	DF005	DF01	DF02	DF04	DF06	DF08	DF10	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum Average forward output rectified current at TA=40	I _{F(AV)}	1.0							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	30							А
Rating for fusig (t<8.3ms)	l ² t	3.7							A ² sec
Maximum instantaneous forward voltage drop per leg at 0.5A	VF	1.10							V
Maximum DC reverse current at TA=25 rated DC blocking voltage per leg TA=125	IR	5 500							μΑ
Typical junction capacitance per eiement at 4.0V,1MHz	Cj	25							pF
Typical thermal resistance per leg (Note 1)	R _{θJA} R _{θJL} R _{θJC}	40 15 18							/W
Operating junction and Storage temperature range	TJ,TSTG	-55 to +150							

Notes: 1. Device mounted P.C.B with 0.47x0.47"(12mmx12mm) Copper Pads.



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Ratings and Characteristics Curves (TA = 25 unless otherwise noted)



Figure 1. Derating Curve Output Rectified Current



Figure 3. Typical Forward Characteristics Per Leg



Figure 5. Typical Junction Capacitance Per Leg



Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Leg



Figure 4. Typical Reverse Leakage Characteristics Per Leg



Figure 6. Typical Transient Thermal Impedance Per Leg



Marking



DATE CODE

Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Code	9	Α	В	С	D	E	F	G	H	J	к	0
Month	1	2	3	4	5	6	7	8	9	10	11	12
Code	1	2	3	4	5	6	7	8	9	0	N	D