1A Miniature Glass Passivated Single-Phase Bridge Rectifiers

■ Features

- Surge overload ratings to 30 amperes peak.
- Recommended for non-automatic applications.
- Ideal for & save space on printed circuit board.
- Applicable for automatic insertion.
- Reliable low cost construction utilizing molded plastic technology results in inexpensive product.
- · Glass passivated chip junctions.
- Suffix "G" indicates Halogen-free part, ex.DF1005G.
- · Lead-free parts meet RoHS requirments.
- UL recognized file # E321971

■ Mechanical data

• Epoxy:UL94-V0 rated flame retardant

· Case: Molded plastic, DF

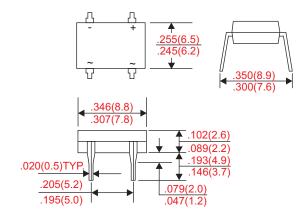
 Terminals: Solder plated, solderable per MIL-STD-750, Method 2026

Polarity: marked on bodyMounting Position: Any

• Weight: Approximated 0.38 gram

Outline

DF



Dimensions in inches and (millimeters)

■ 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%.

Parameter	Conditions	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	at TA = 40°C	I _o			1.0	Α
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I _{FSM}			30	А
Reverse current	$V_R = V_{RRM} T_A = 25^{\circ}C$				5.0	uA
	$V_R = V_{RRM} T_A = 125^{\circ}C$	I _R			500	
Storage temperature		T _{stg}	-55		+150	°C

$\begin{array}{c} & \text{Max.} \\ \text{repetitive peak} \\ \text{reverse voltage} \\ & V_{\text{RRM}}\left(V\right) \end{array}$		Max. DC blocking voltage $V_{_{\mathbb{R}}}(V)$	Max. forward voltage @1A, $T_A = 25^{\circ}C$	Operating temperature T _J (°C)
			$V_{F}(V)$	1, (C)
F1005 50	35	50		
F101 100	70	100		
0F102 200	140	200		
)F104 400	280	400	1.1	-55 ~ +150
0F106 600	420	600		
F108 800	560	800		
DF110 1000	700	1000		
)F1()F1(04 400 06 600 08 800	04 400 280 06 600 420 08 800 560	04 400 280 400 06 600 420 600 08 800 560 800	04 400 280 400 06 600 420 600 08 800 560 800

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■ Rating and characteristic curves

DERATING CURVE

1.2

1.2

1.0

0.8

0.6

0.6

0.4 Single Phase
Half Wave 60Hz

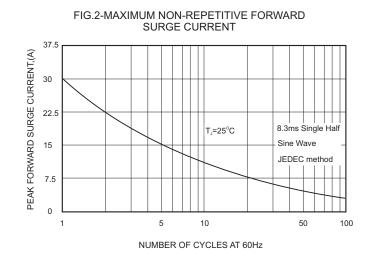
Resistive Or Inductive Load

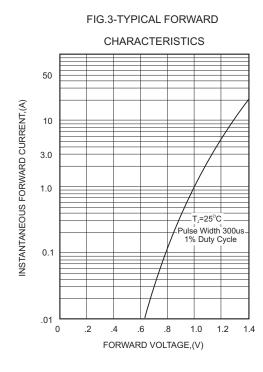
100

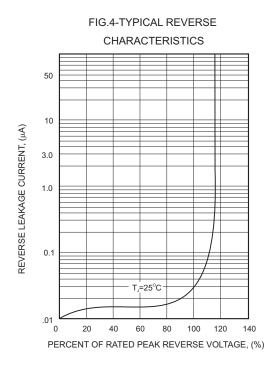
CASE TEMPERATURE,(°C)

175

FIG.1-TYPICAL FORWARD CURRENT







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DF1005 THRU DF110

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