DF1505S THRU DF1510S

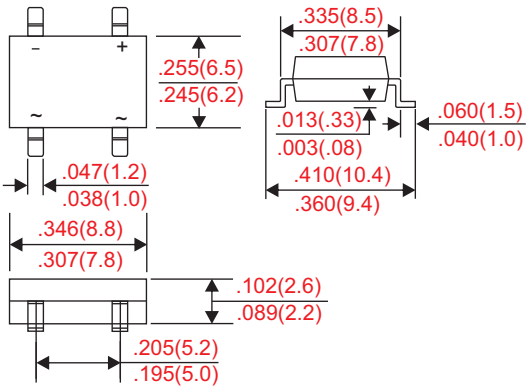
1.5A Miniature Glass Passivated Single-Phase Surface Mount Bridge Rectifiers

■ Features

- Surge overload ratings to 30 amperes peak.
- Surface mount type for automated replacement.
- Ideal for printed board.
- Low forward drop down voltage.
- Reliable low cost construction utilizing molded plastic technology results in inexpensive product.
- Glass passivated chip junctions.
- Suffix "G" indicates Halogen-free part, ex.DF1505SG.
- Lead-free parts meet RoHS requirments.
- UL recognized file # E321971

■ Outline

DFS



Dimensions in inches and (millimeters)

■ Mechanical data

- Epoxy:UL94-V0 rated flame retardant
- Case : Molded plastic, DFS
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : marked on body
- Mounting Position : Any
- Weight : Approximated 1.00 gram

■ 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 T_A = 40°C	I_O			1.5	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}			50	A
Reverse current	V_R = V_{RRM} T_A = 25°C	I_R			5.0	uA
	V_R = V_{RRM} T_A = 125°C				500	
Storage temperature		T_{STG}	-55		+150	°C

Symbol	Marking code	Max. repetitive peak reverse voltage V_{RRM} (V)	Max. RMS voltage V_{RMS} (V)	Max. DC blocking voltage V_R (V)	Max. forward voltage @1.5A, T_A = 25°C V_F (V)	Operating temperature T_J (°C)
DF1505S	DF1505S	50	35	50	1.1	-55 ~ +150
DF151S	DF151S	100	70	100		
DF152S	DF152S	200	140	200		
DF154S	DF154S	400	280	400		
DF156S	DF156S	600	420	600		
DF158S	DF158S	800	560	800		
DF1510S	DF1510S	1000	700	1000		

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■ Rating and characteristic curves

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

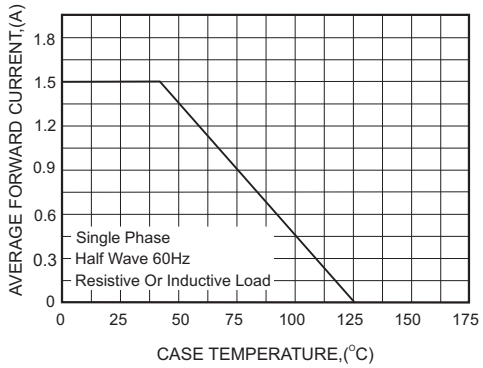


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

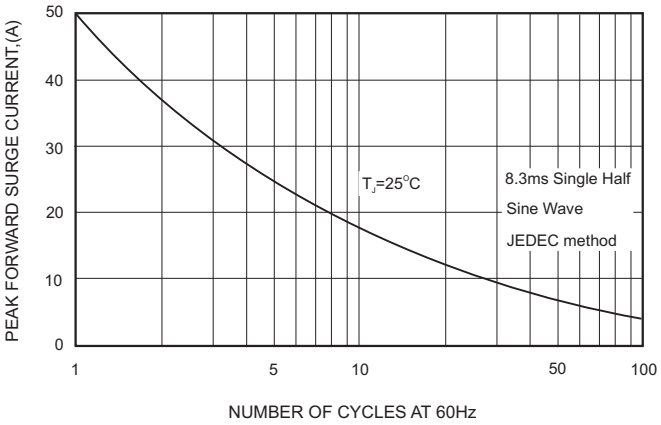


FIG.3-TYPICAL FORWARD CHARACTERISTICS

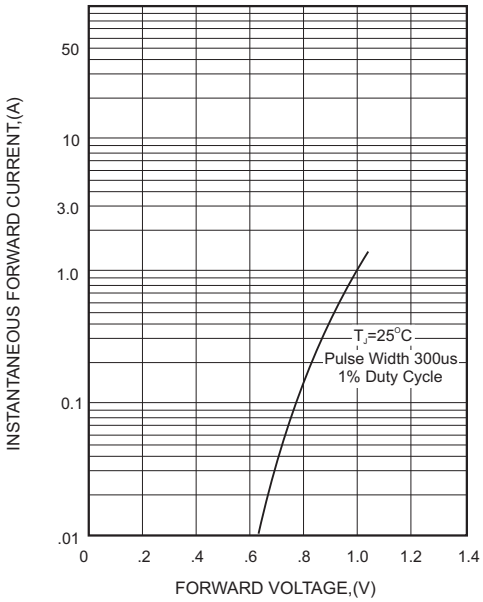
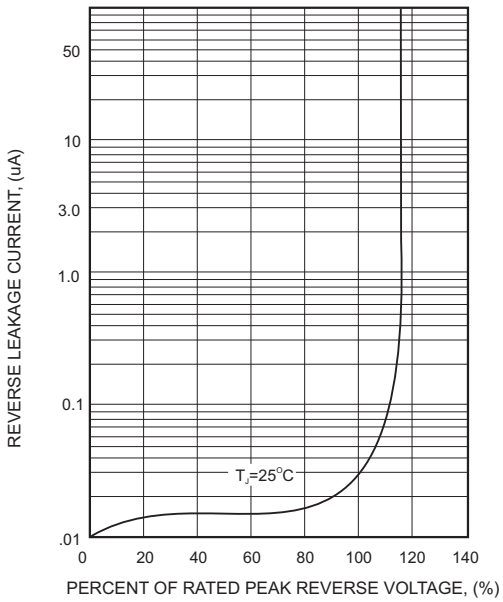


FIG.4-TYPICAL REVERSE CHARACTERISTICS



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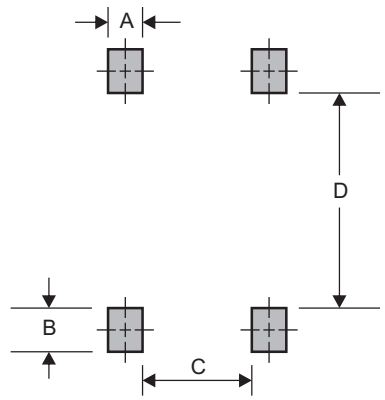
■ DFS foot print



A	B	C	D
0.059 (1.50)	0.047 (1.20)	0.157 (4.00)	0.291 (7.40)

Dimensions in inches and (millimeters)

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