0.5 / 0.8A Miniature Glass Passivated Single-Phase Surface Mount Bridge Rectifiers

■ Features

- Surge overload ratings to 30 amperes peak.
- Save space on printed circuit board.
- Ideal for automated replacement.
- Reliable low cost construction utilizing molded plastic technology results in inexpensive product.
- Glass passivated chip junctions.
- Suffix "G" indicates Halogen-free part, ex.MB05SG.
- UL recognized file # E321971

■ Mechanical data

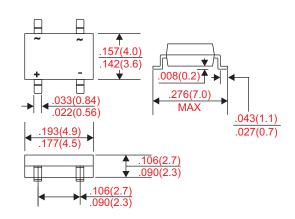
Epoxy:UL94-V0 rated flame retardant
Case: Molded plastic, MDS / TO-269AA
Terminals: Solder plated, solderable per

MIL-STD-750, Method 2026

Polarity: marked on bodyWeight: 0.04 ounce, 1.0 gram

Outline

MDS(TO-269AA)



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
Famour description of the second	at T _A = 30°C on glass-epoxy PCB	Io			0.8	A
Forward rectified current					0.5	
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I _{FSM}			35	Α
Daviana avenue t	$V_R = V_{RRM} T_A = 25^{\circ}C$				5.0	uA
Reverse current	$V_R = V_{RRM} T_A = 125^{\circ}C$	I _R			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 $@0.4A, T_A = 25^{\circ}C$ $V_F(V)$	Operating temperature T _J (°C)	
MB05S	MB05S	50	35	50			
MB1S	MB1S	100	70	100			
MB2S	MB2S	200	140	200			
MB4S	MB4S	400	280	400	1.0	-55 ~ +150	
MB6S	MB6S	600	420	600			
MB8S	MB8S	800	560	800			
MB10S	MB10S	1000	700	1000			

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■ Rating and characteristic curves

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

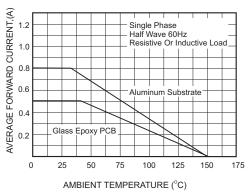


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

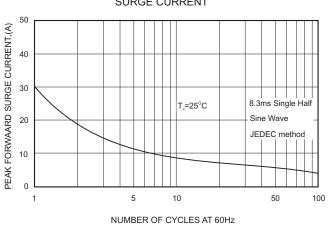
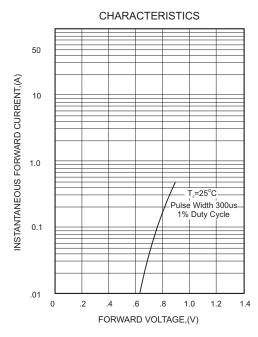
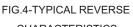
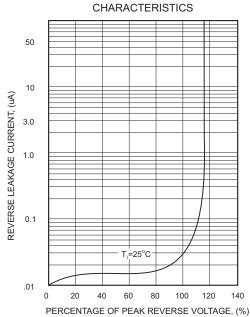


FIG.3-TYPICAL FORWARD



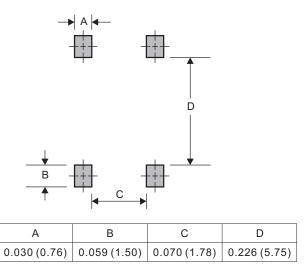




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■ MDS(TO-269AA) foot print



Dimensions in inches and (millimeters)

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