

**DF01 THRU DF07 SINGLE-PHASE
GLASS PASSIVATED SILICON BRIDGE RECTIFIER**

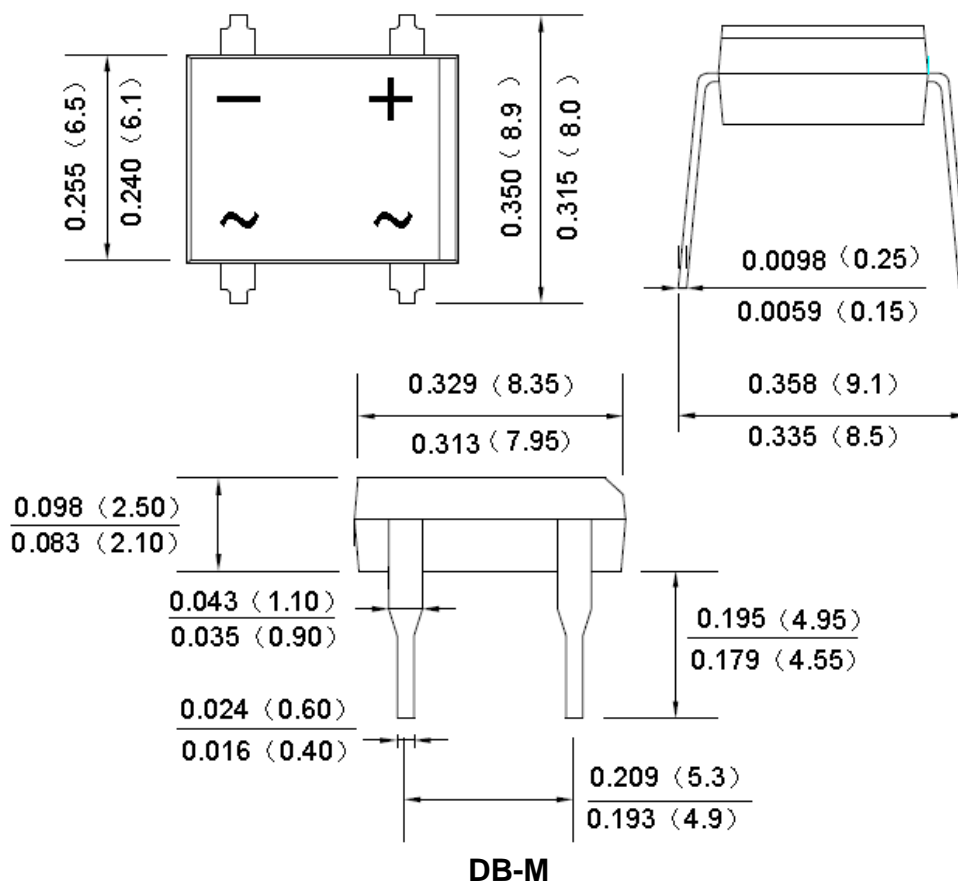
Features:

- Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability
- Plastic material-UL flammability 94V-0

Mechanical Data:

- Case: DB-M, molded plastic
- Terminals: plated leads solderable per MIL-STD-202, Method 208
- Polarity: as marked on case
- Mounting position: Any
- Marking: type number
- Lead Free: For RoHS / Lead Free Version,

Mechanical Dimensions: In Inches/ mm





DF01 THRU DF07

Technical Data
Data Sheet N1735, Rev. A

Green Products

Ordering Information:

Device	Package	Shipping
DF01-DF07	DB-M (Pb-Free)	50pcs / tube

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified
Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Type Number	Symbol	DF01	DF02	DF03	DF04	DF05	DF06	DF07	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Average Forward Output Current (Note 1) @ $T_A = 40^\circ\text{C}$	I_O	1.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50							A
Forward Voltage Drop per Bridge Element @ $I_F=1.0\text{A}$	V_F	1.1							V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 125^\circ\text{C}$	I_R	5 500							μA
Typical Junction Capacitance per leg (Note 2)	C_J	25							pF
Typical Thermal Resistance per leg	$R_{\theta JA}$	40							$^\circ\text{C/W}$
	$R_{\theta JL}$	15							
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55+150							$^\circ\text{C}$

Note: 1. Mounted on glass epoxy PC board with 1.3mm² solder pad.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

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Fig. 1 Output Current Derating Curve

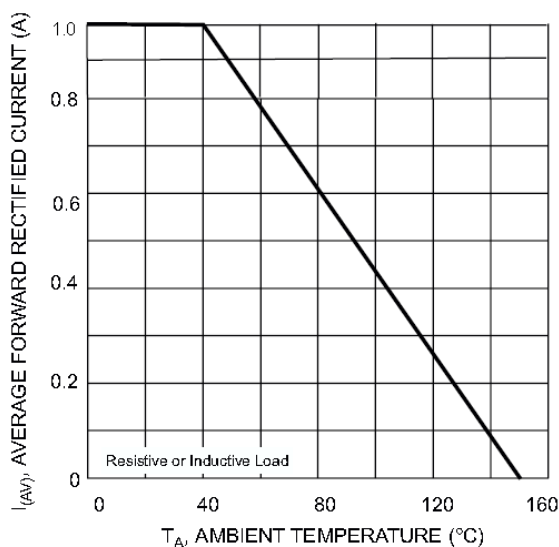


Fig. 2 Typical Forward Characteristics (per leg)

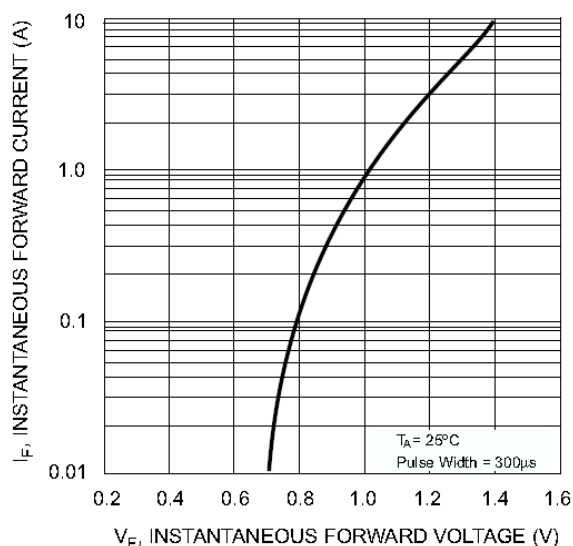


Fig. 3 Maximum Peak Forward Surge Current (per leg)

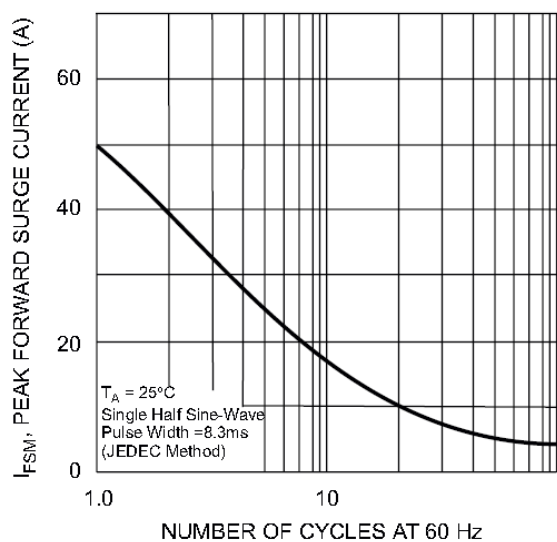
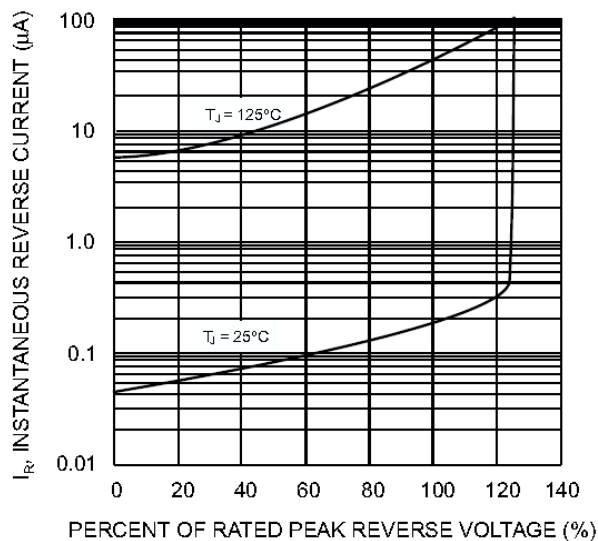


Fig. 4 Typical Reverse Characteristics (per element)





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