



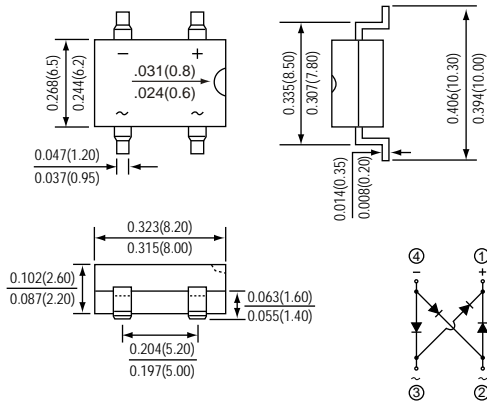
# DF02S THRU DF10S

## SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

*Reverse Voltage - 200 to 1000 Volts*

*Forward Current - 1.0 Ampere*

**DFS**



\*Dimensions in inches and (millimeters)



### FEATURES

- \* Glass passivated chip junctions
- \* Low Forward Voltage Drop, High Current Capability
- \* High Surge Current Capability
- \* Designed for Surface Mount Application
- \* Plastic Material-UL Recognition Flammability Classification 94V-0

### MECHANICAL DATA

Case : Molded Plastic  
 Terminals : Tin Plated, solderable per MIL-STD-750, Method 2026  
 Polarity : As marked on Case  
 Weight : 0.38 gram

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

<i>Ratings at 25 °C ambient temperature unless otherwise specified.</i>	SYMBOLS	DF02S	DF04S	DF06S	DF08S	DF10S	UNITS
Maximum repetitive peak reverse voltage	VRRM	200	400	600	800	1000	Volts
Maximum RMS voltage	VRMS	140	280	420	560	700	Volts
Maximum DC blocking voltage	VDC	200	400	600	800	1000	Volts
Maximum average forward rectified current @ TA=40°C	I(AV)	1.0					Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	30					Amps
Maximum instantaneous forward voltage @ IF=1.0 A	VF	1.1					Volts
Maximum DC reverse current @TC=25°C at rated DC blocking voltage @TC=125°C	IR	5 500					uA
I <sup>2</sup> t rating for fusing ( t < 8.3ms )	I <sup>2</sup> t	10.4					A <sup>2</sup> s
Typical junction capacitance per element (NOTE 1)	CJ	25					pF
Typical thermal resistance, junction to ambient (NOTE 2)	R θJA	40					°C / W
Operating junction and storage temperature range	TJ,TSTG	-55 to +150					°C

NOTES : (1) Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC.  
 (2) Thermal resistance, junction to ambient, measured on PC board with 5.0mm<sup>2</sup> (0.03mm thick) land areas.

# RATINGS AND CHARACTERISTIC CURVES DF02S THRU DF10S

FIG.1 - FORWARD CURRENT DERATING CURVE

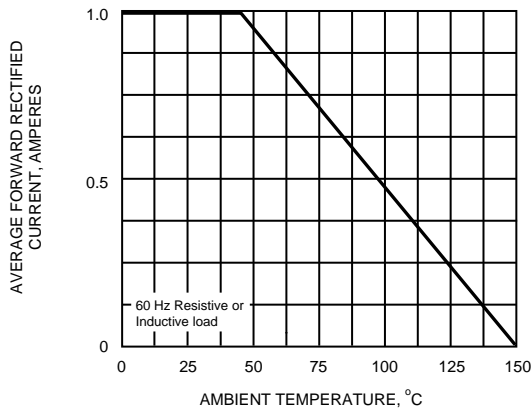


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

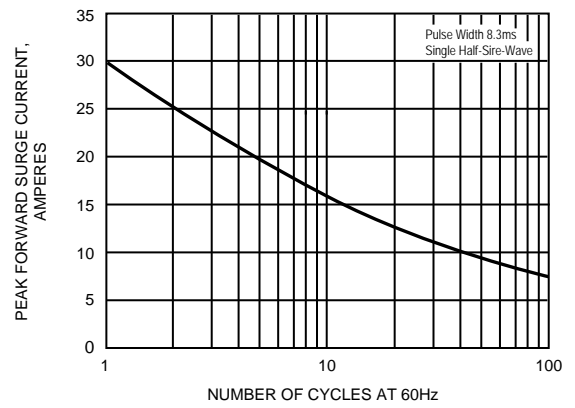


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

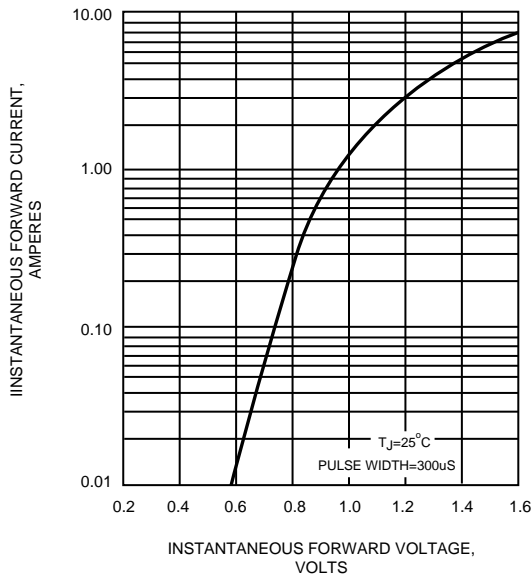


FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

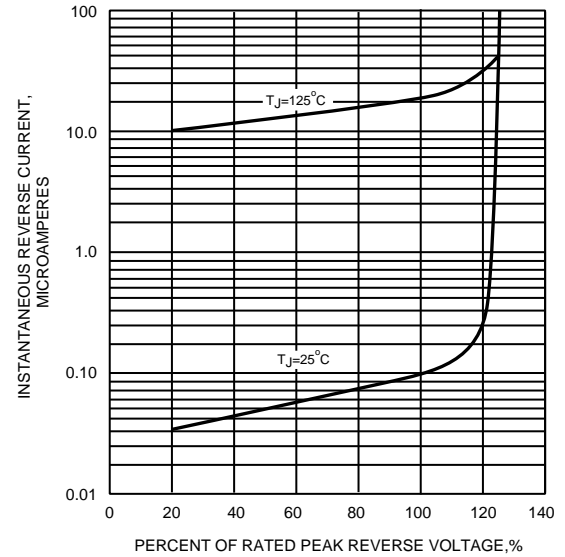


FIG.5 - TYPICAL JUNCTION CAPACITANCE

