

1.0 A Single-Phase Glass Passivated Bridge Rectifiers Rectifier Reverse Voltage 50 to 1000V



Features

- This series is UL listed under the Recognized Component Index, file number E142814
- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- Surge overload ratings to 50 amperes
- Ideal for printed circuit board application
- High temperature soldering guaranteed 265 °C /10 seconds at 5 lbs (2.3kg) tension

Mechanical Data

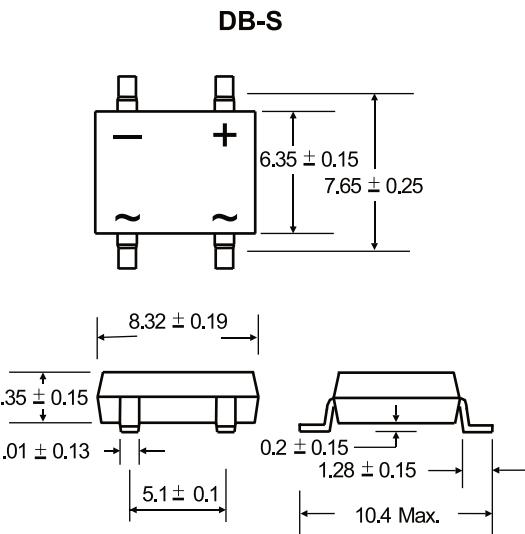
Case: Molded plastic

Terminals: Plated leads solderable per MIL-STD-202,
Method 208

Polarity: Marked on body

Mounting Position: Any

Weight: 0.38 grams (approx)



Dimensions in millimeters (1mm = 0.0394")

Maximum Ratings & Thermal Characteristics

Rating at 25°C ambient temperature unless otherwise specified, Resistive or Inductive load, 60 Hz.
For Capacitive load derate current by 20%.

Parameter	Symbol	DF005S	DF01S	DF02S	DF04S	DF06S	DF08S	DF10S	unit
Marking		DF005S	DF01S	DF02S	DF04S	DF06S	DF08S	DF10S	
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS bridge input voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	V
Maximum average forward rectified output current at TA=40°C	IF(AV)					1.0			A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	IFSM					50			A
Rating for fusing (t<8.3ms)	I ² t					10			A ² sec
Typical thermal resistance per element (1)	RthJA					110			°C / W
Typical junction capacitance per element (2)	C _j					25.0			pF
Operating junction and storage temperature range	T _J , T _{TSG}					-55 to + 150			°C

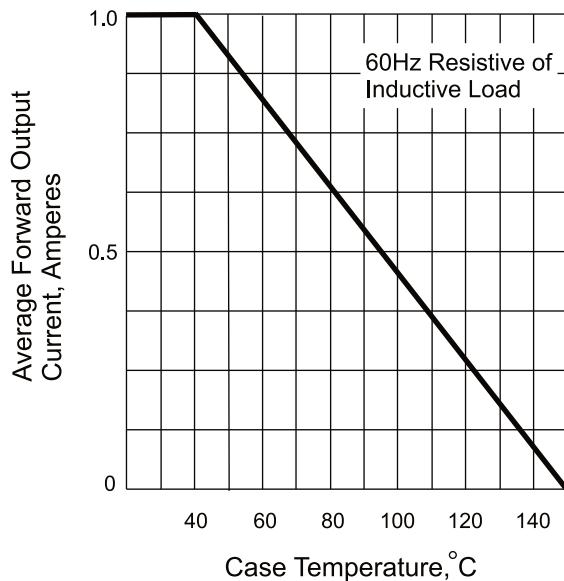
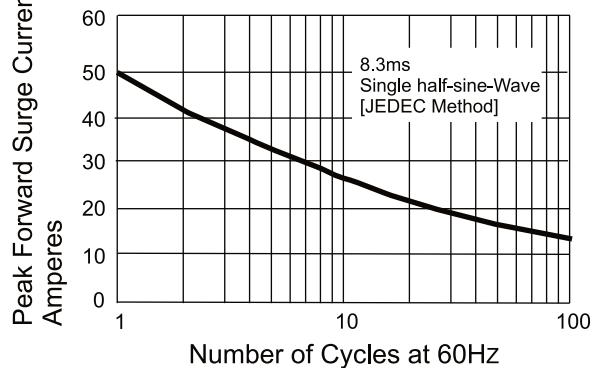
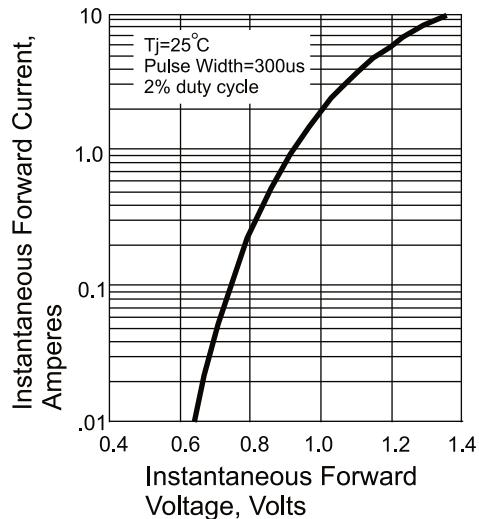
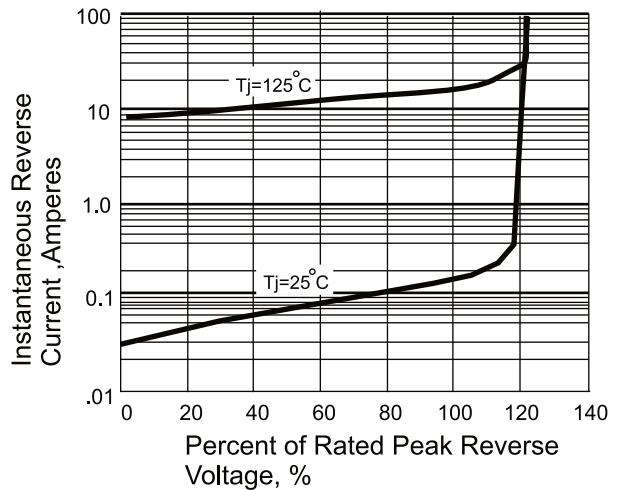
Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified. Resistive or Inductive load, 60Hz.
For Capacitive load derate by 20 %.

Parameter	Symbol	DF005S	DF01S	DF02S	DF04S	DF06S	DF08S	DF10S	Unit
Maximum instantaneous forward voltage drop per leg at 1.0A	VF				1.1				V
Maximum DC reverse current at rated TA =25°C DC blocking voltage per element TA =125°C	IR				10	500			μA

Notes: (1)Thermal resistance from Junction to Ambient on P.C.board mounting.

(2)Measured at 2.0MHz and applied reverse voltage of 4.0 volts.

Rating and Characteristic Curves ($T_A=25^\circ\text{C}$ Unless otherwise noted)
Fig. 1 Derating Curve for Output Rectified Current

Fig. 2 Maximum Non-repetitive Peak Forward Surge Current

Fig. 3 Typical Instantaneous Forward Characteristics

Fig. 4 Typical Reverse Characteristics

Fig. 5 Typical Junction Capacitance
