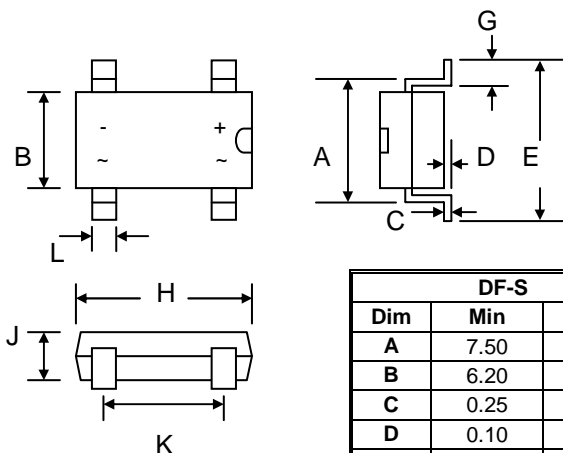


1.0A SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

Features

- Glass Passivated Die Construction
- Low Forward Voltage Drop
- High Current Capability
- High Surge Current Capability
- Designed for Surface Mount Application
- Plastic Material – UL Recognition Flammability Classification 94V-O



Mechanical Data

- Case: DF-S, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Case
- Weight: 1.0 grams (approx.)
- Mounting Position: Any
- Marking: Type Number
- **Lead Free: For RoHS / Lead Free Version, Add “-LF” Suffix to Part Number, See Page 4**

DF-S		
Dim	Min	Max
A	7.50	8.50
B	6.20	6.80
C	0.25	—
D	0.10	0.28
E	9.40	10.30
G	1.02	1.53
H	8.00	8.51
J	2.20	2.60
K	5.00	5.20
L	0.89	1.20
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

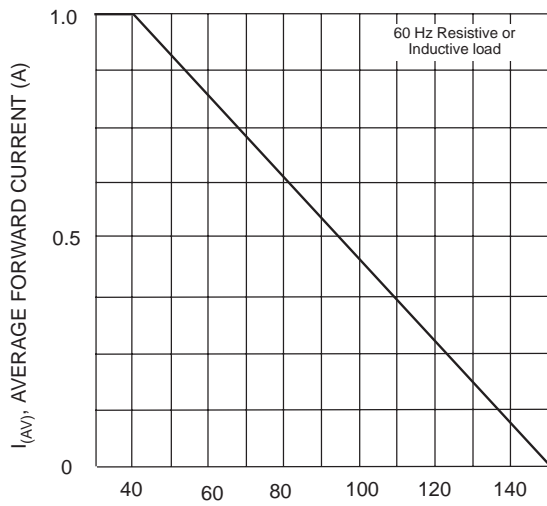
Single Phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

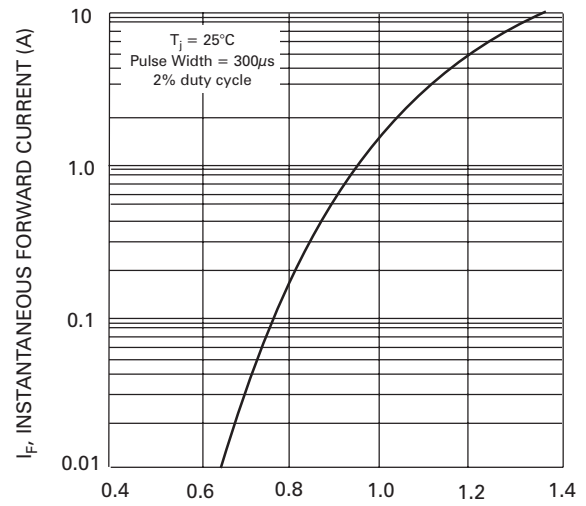
Characteristic	Symbol	DF 005S	DF 01S	DF 02S	DF 04S	DF 06S	DF 08S	DF 10S	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V _{R(RMS)}	35	70	140	280	420	560	700	V
Average Rectified Output Current @T _A = 40°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 per element @I _F = 1.0A	V _{FM}	1.1							V
Peak Reverse Current @T _A = 25°C At Rated DC Blocking Voltage @T _A = 125°C	I _{RM}	5.0 500							μA
Typical Junction Capacitance per element (Note 1)	C _j	25							pF
Typical Thermal Resistance per leg (Note 2)	R _{θJA} R _{θJL}	40 15							°C/W
Operating and Storage Temperature Range	T _j , T _{STG}	-65 to +150							°C

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

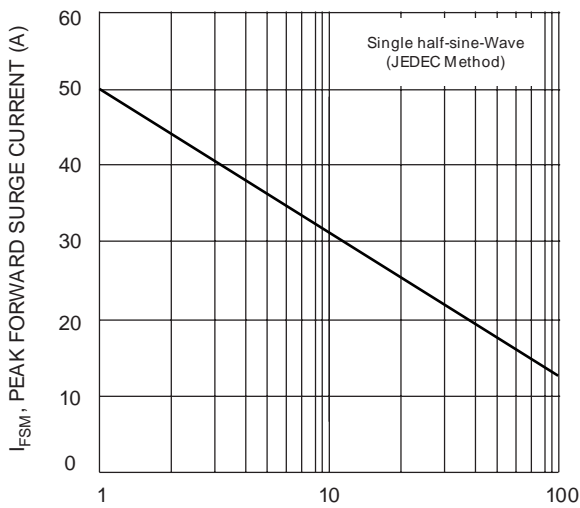
2. Mounted on PC board with 13mm² copper pad.



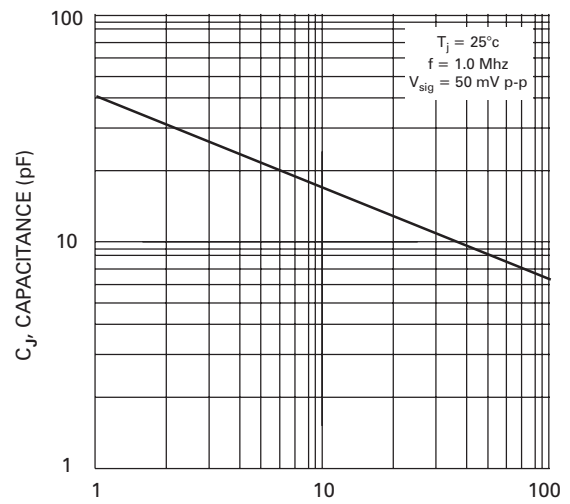
T_A , AMBIENT TEMPERATURE ($^{\circ}\text{C}$)
Fig. 1 Output Current Derating Curve



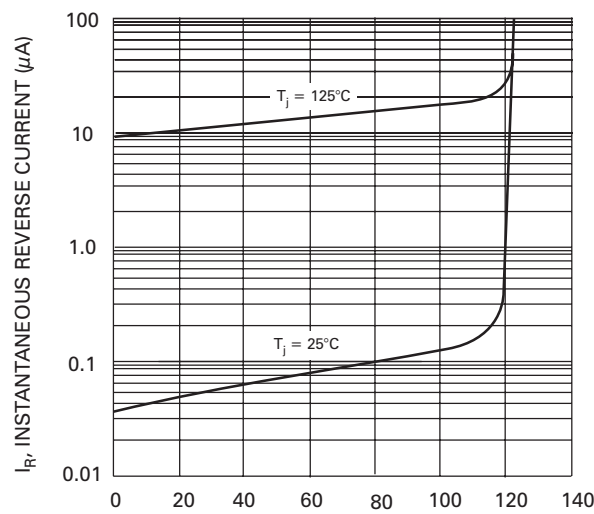
V_F , INSTANTANEOUS FORWARD VOLTAGE (V)
Fig. 2 Typ Forward Characteristics (per element)



NUMBER OF CYCLES AT 60 Hz
Fig. 3 Max Non-Repetitive Peak Forward Surge Current

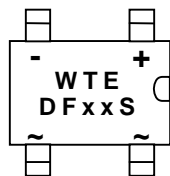


V_R , REVERSE VOLTAGE (V)
Fig. 4 Typ Junction Capacitance (per element)



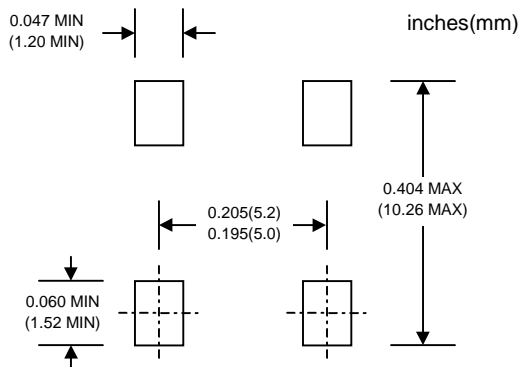
PERCENT OF RATED PEAK REVERSE VOLTAGE (%)
Fig. 5 Typ Reverse Characteristics (per element)

MARKING INFORMATION



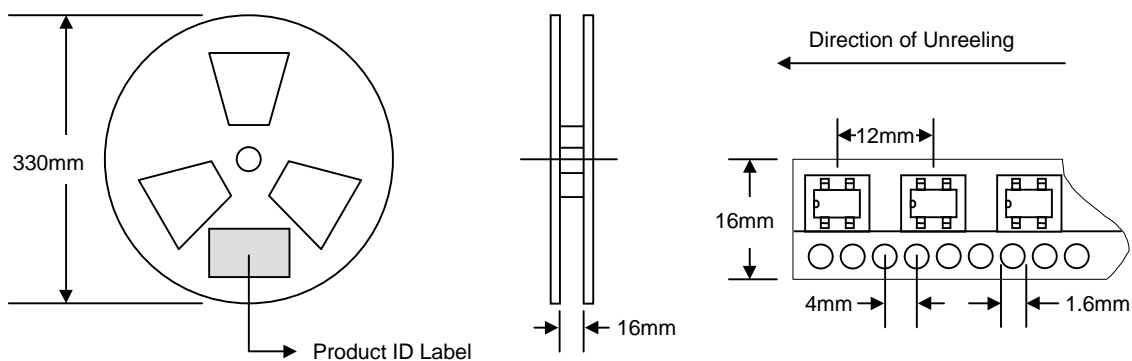
WTE = Manufacturer's Logo
 DFxxS = Device Number
 xx = 005, 01, 02, 04, 06, 08 or 10
 Polarity = As Marked on Body

RECOMMENDED FOOTPRINT



PACKAGING INFORMATION

TAPE & REEL



Reel Diameter (mm)	Quantity (PCS)	Inner Box Size L x W x H (mm)	Quantity (PCS)	Carton Size L x W x H (mm)	Quantity (PCS)	Approx. Gross Weight (KG)
330	1,500	340 x 337 x 45	3,000	370 x 370 x 420	24,000	17.0

Note: 1. Anti-static or paper reel, blue or white color.
 2. Components are packed in accordance with EIA standard 481-1 and 481-2.

ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
DF005S-T3	DIL Bridge SMD	1500/Tape & Reel
DF01S-T3	DIL Bridge SMD	1500/Tape & Reel
DF02S-T3	DIL Bridge SMD	1500/Tape & Reel
DF04S-T3	DIL Bridge SMD	1500/Tape & Reel
DF06S-T3	DIL Bridge SMD	1500/Tape & Reel
DF08S-T3	DIL Bridge SMD	1500/Tape & Reel
DF10S-T3	DIL Bridge SMD	1500/Tape & Reel

1. Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
2. **To order Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, DF005S-T3-LF.**

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WARNING: DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

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