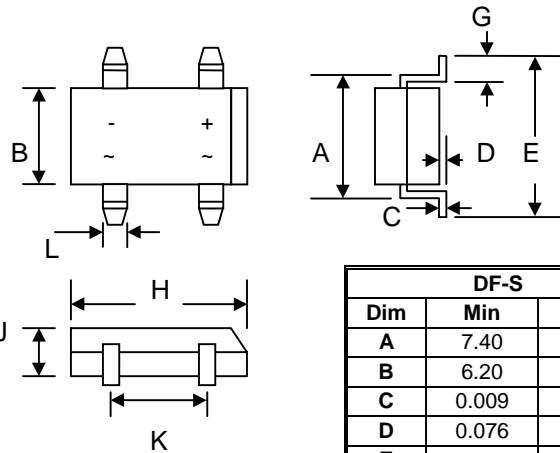


### Features

- 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



DF-S		
Dim	Min	Max
A	7.40	7.90
B	6.20	6.50
C	0.009	0.25
D	0.076	0.33
E	—	10.40
G	1.02	1.53
H	8.13	8.51
J*	3.20	3.40
K	5.0	5.20
L	1.00	1.20
All Dimensions in mm		

### Mechanical Data

- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Case
- Weight: 0.38 grams (approx.)
- Mounting Position: Any
- Marking: Type Number

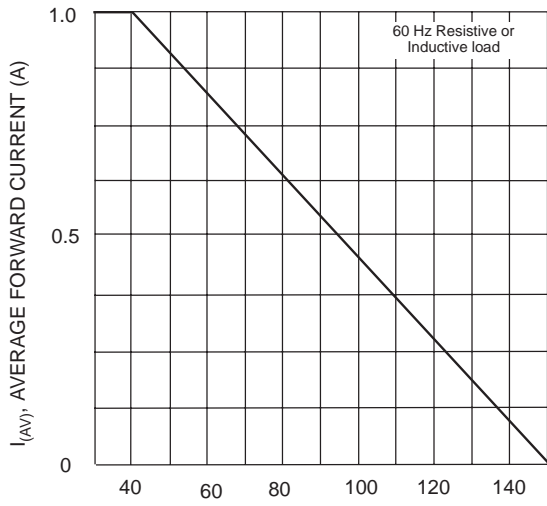
\*Low profile models (J = 2.20~2.50mm) are available.  
Please consult factory.

### Maximum Ratings and Electrical Characteristics @T<sub>A</sub>=25°C unless otherwise specified

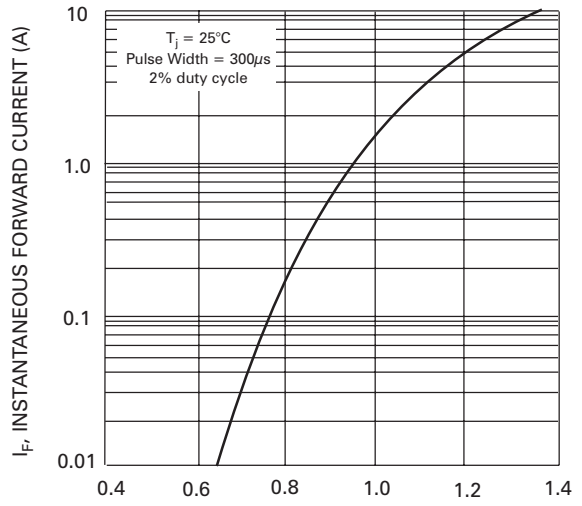
Single Phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

Characteristic	Symbol	DF 005S	DF 01S	DF 02S	DF 04S	DF 06S	DF 08S	DF 10S	Unit
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	V <sub>RWM</sub>								
DC Blocking Voltage	V <sub>R</sub>								
RMS Reverse Voltage	V <sub>R(RMS)</sub>	35	70	140	280	420	560	700	V
Average Rectified Output Current @T <sub>A</sub> = 40°C	I <sub>O</sub>	1.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	30							A
Forward Voltage per element @I <sub>F</sub> = 1.0A	V <sub>FM</sub>	1.1							V
Peak Reverse Current @T <sub>A</sub> = 25°C At Rated DC Blocking Voltage @T <sub>A</sub> = 125°C	I <sub>RM</sub>	10 500							μA
Typical Junction Capacitance per element (Note 1)	C <sub>j</sub>	25							pF
Typical Thermal Resistance (Note 2)	R <sub>θJA</sub>	110							K/W
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>STG</sub>	-65 to +150							°C

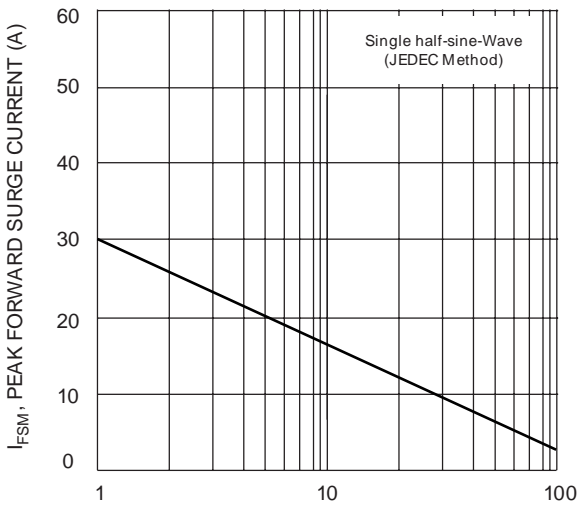
Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.  
2. Thermal resistance junction to ambient mounted on PC board with 5.0mm<sup>2</sup> (0.03mm thick) land areas.



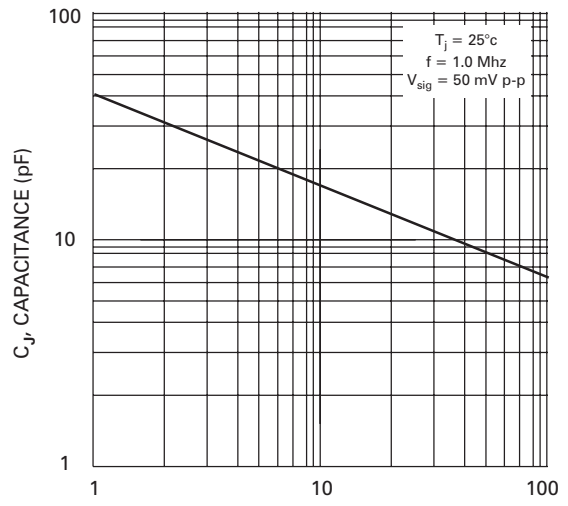
$T_A$ , AMBIENT TEMPERATURE (°C)  
Fig. 1 Output Current Derating Curve



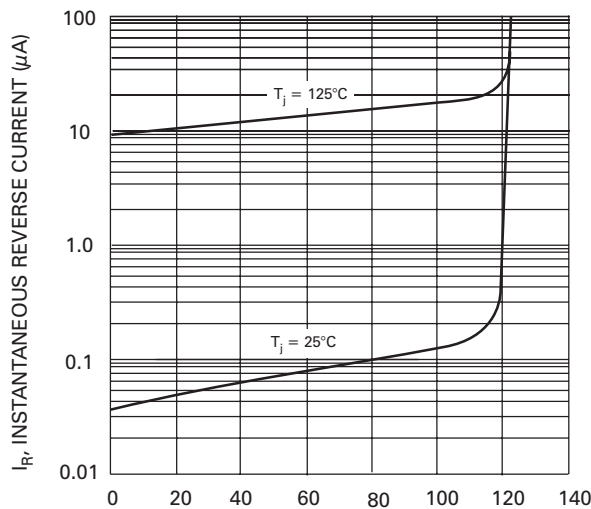
$V_F$ , INSTANTANEOUS FORWARD VOLTAGE (V)  
Fig. 2 Typ Forward Characteristics (per element)



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)

## ORDERING INFORMATION

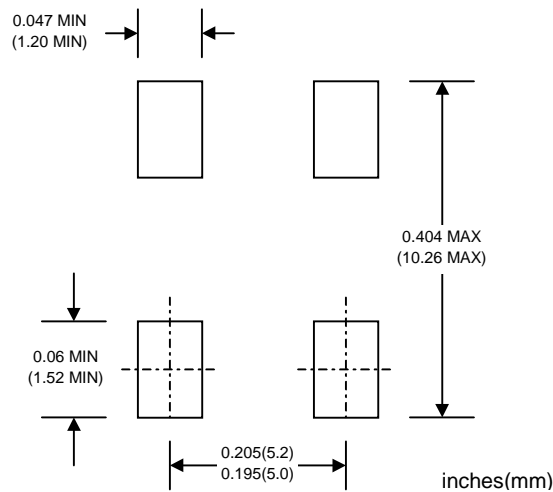
Product No. ♦	Package Type	Shipping Quantity
<b>DF005S-T3</b>	DIL Bridge SMD	1500/Tape & Reel
DF005S	DIL Bridge SMD	50 Units/Tube
<b>DF01S-T3</b>	DIL Bridge SMD	1500/Tape & Reel
DF01S	DIL Bridge SMD	50 Units/Tube
<b>DF02S-T3</b>	DIL Bridge SMD	1500/Tape & Reel
DF02S	DIL Bridge SMD	50 Units/Tube
<b>DF04S-T3</b>	DIL Bridge SMD	1500/Tape & Reel
DF04S	DIL Bridge SMD	50 Units/Tube
<b>DF06S-T3</b>	DIL Bridge SMD	1500/Tape & Reel
DF06S	DIL Bridge SMD	50 Units/Tube
<b>DF08S-T3</b>	DIL Bridge SMD	1500/Tape & Reel
DF08S	DIL Bridge SMD	50 Units/Tube
<b>DF10S-T3</b>	DIL Bridge SMD	1500/Tape & Reel
DF10S	DIL Bridge SMD	50 Units/Tube

Products listed in **bold** are WTE **Preferred** devices.

♦T3 suffix refers to a 13" reel.

Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.

## RECOMMENDED FOOTPRINT



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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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**Internet:** <http://www.wontop.com>

*We power your everyday.*