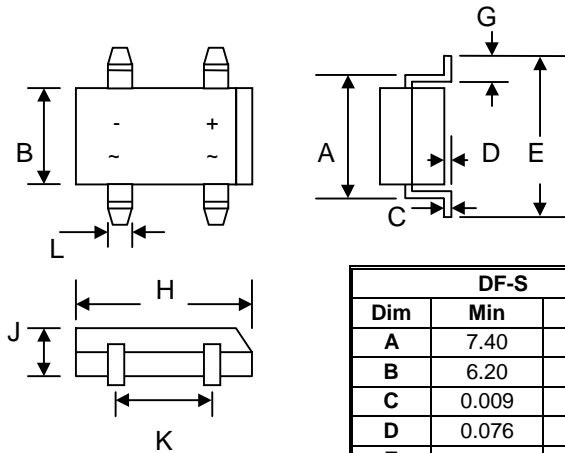


Features

- 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	8.03	8.51
J	2.20	2.50
K	5.0	5.20
L	1.00	1.20
All Dimensions in mm		

Mechanical Data

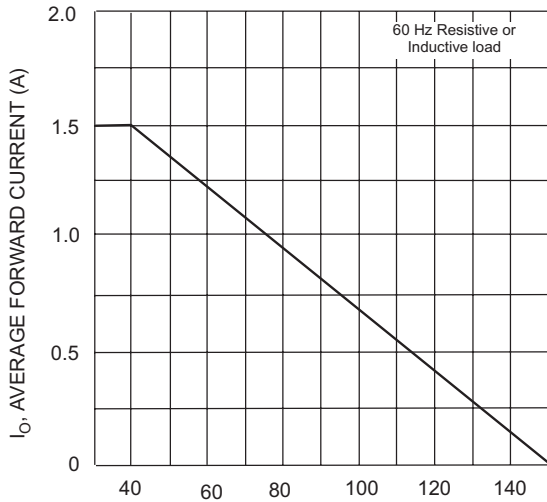
- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Case
- Weight: 0.38 grams (approx.)
- Mounting Position: Any
- Marking: Type Number

Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

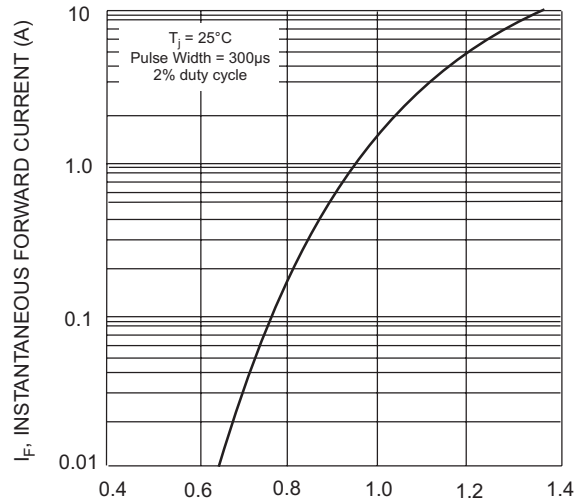
Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic	Symbol	DF 150S	DF 151S	DF 152S	DF 154S	DF 156S	DF 158S	DF 1510S	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	V_{RWM}								
DC Blocking Voltage	V_R								
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectified Output Current @ $T_A = 40^\circ\text{C}$	I_O	1.5							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 @ $I_F = 1.5\text{A}$	V_{FM}	1.1							V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 125^\circ\text{C}$	I_{RM}	10 500							μA
Typical Junction Capacitance per element (Note 1)	C_j	25							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	74							K/W
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +150							$^\circ\text{C}$

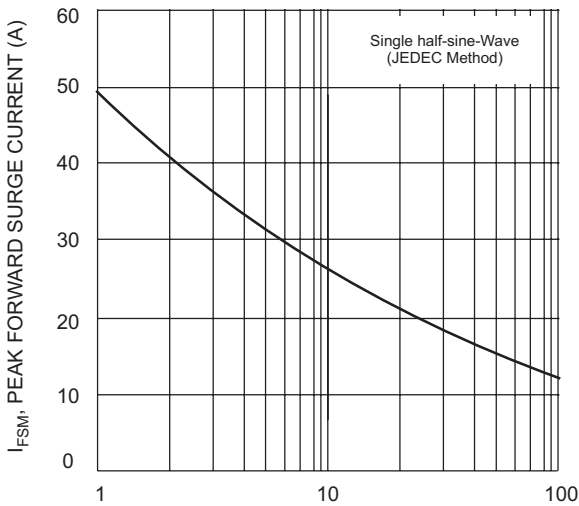
Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.
2. Thermal resistance junction to ambient mounted on PC board with 5.0mm² (0.03mm thick) land areas.



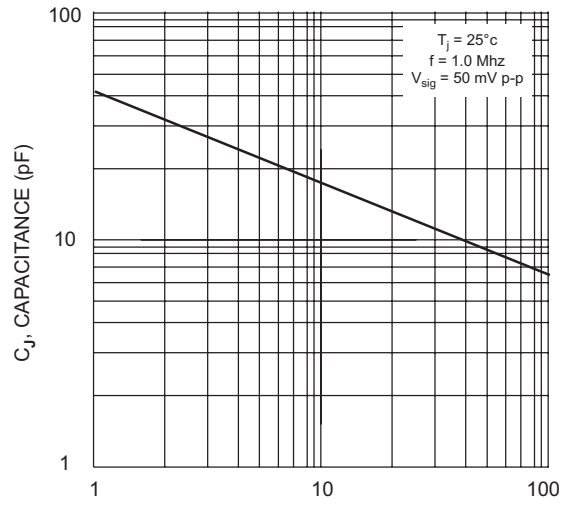
T_A , AMBIENT TEMPERATURE (°C)
Fig. 1 Output Current Derating Curve



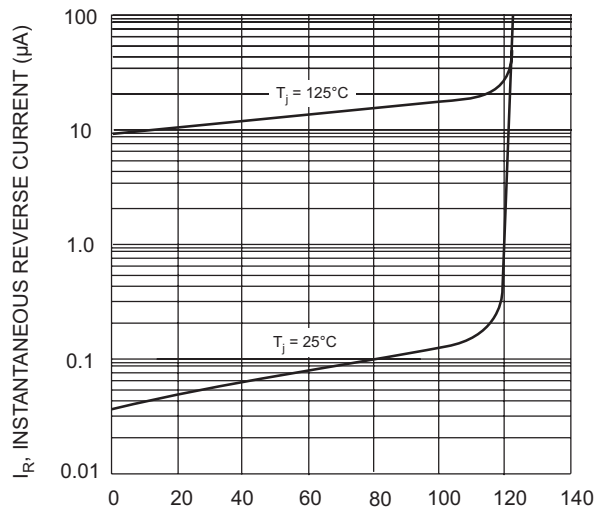
V_F , INSTANTANEOUS FORWARD VOLTAGE (V)
Fig. 2 Typ Forward Characteristics (per element)



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

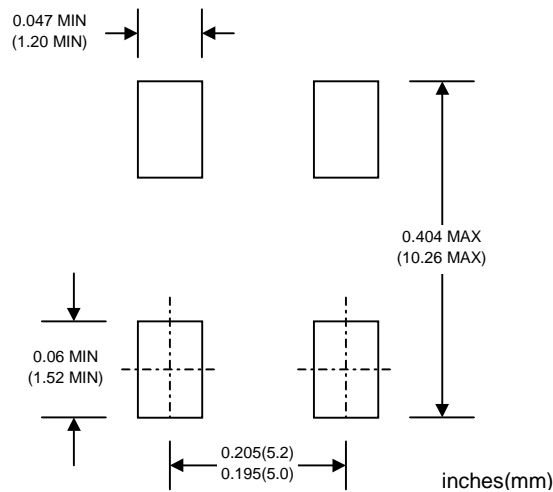
Product No. ♦	Package Type	Shipping Quantity
DF150S-T3	DIL Bridge SMD	1500/Tape & Reel
DF150S	DIL Bridge SMD	50 Units/Tube
DF151S-T3	DIL Bridge SMD	1500/Tape & Reel
DF151S	DIL Bridge SMD	50 Units/Tube
DF152S-T3	DIL Bridge SMD	1500/Tape & Reel
DF152S	DIL Bridge SMD	50 Units/Tube
DF154S-T3	DIL Bridge SMD	1500/Tape & Reel
DF154S	DIL Bridge SMD	50 Units/Tube
DF156S-T3	DIL Bridge SMD	1500/Tape & Reel
DF156S	DIL Bridge SMD	50 Units/Tube
DF158S-T3	DIL Bridge SMD	1500/Tape & Reel
DF158S	DIL Bridge SMD	50 Units/Tube
DF1510S-T3	DIL Bridge SMD	1500/Tape & Reel
DF1510S	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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