

Data Sheet 1330 Rev.B

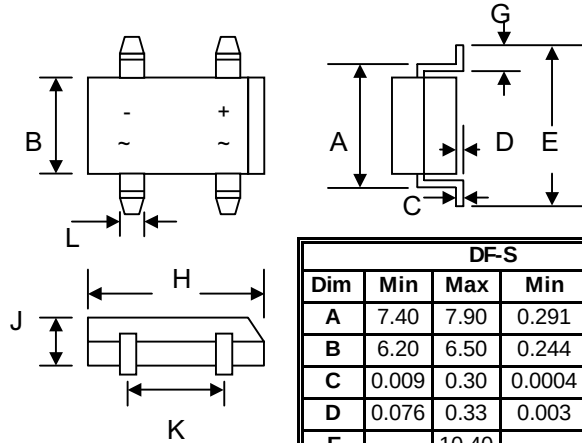
Features

- 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
- UL Recognized File # E223064

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.



DF-S				
Dim	Min	Max	Min	Max
A	7.40	7.90	0.291	0.311
B	6.20	6.50	0.244	0.256
C	0.009	0.30	0.0004	0.012
D	0.076	0.33	0.003	0.013
E	—	10.40	—	0.409
G	1.02	1.53	0.040	0.060
H	8.13	8.51	0.320	0.321
J*	2.20	2.50	0.087	0.098
K	5.0	5.20	0.197	0.205
L	1.0	1.20	0.039	0.047
		In mm	In inch	

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

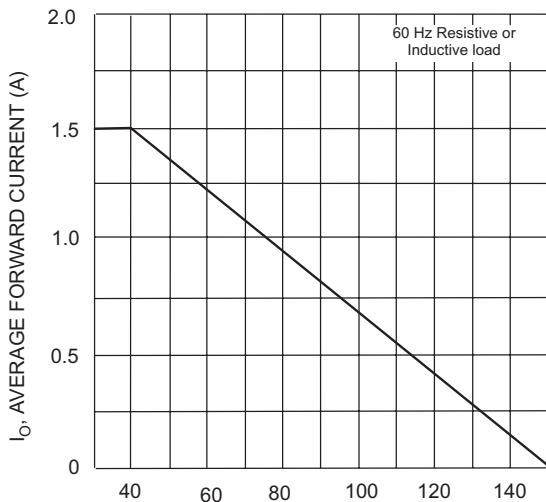
Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic	Symbol	DF 150S	DF 151S	DF 152S	DF 154S	DF 156S	DF 158S	DF 1510S	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	1.5							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 = 1.5A	V _{FM}	1.1							V
Peak Reverse Current @T _A = 25°C At Rated DC Blocking Voltage @T _A = 125°C	I _{RM}	10 500							μA
Typical Junction Capacitance per element (Note 1)	C _j	25							pF
Typical Thermal Resistance (Note 2)	R _{θJA}	74							K/W
Operating and Storage Temperature Range	T _j , T _{STG}	-65 to +150							°C

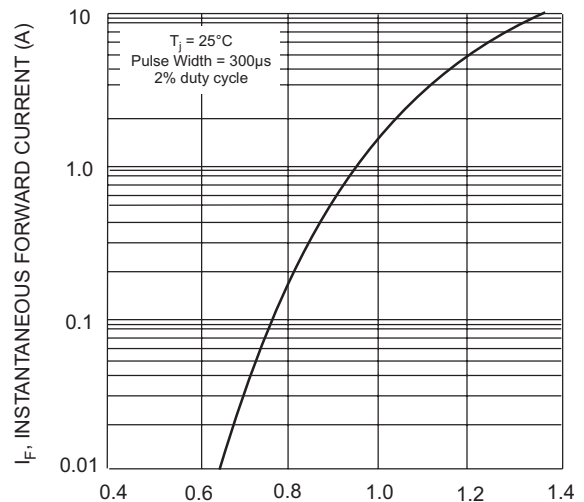
Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

2. Thermal resistance junction to ambient mounted on PC board with 5.0mm² (0.03mm thick) land areas.

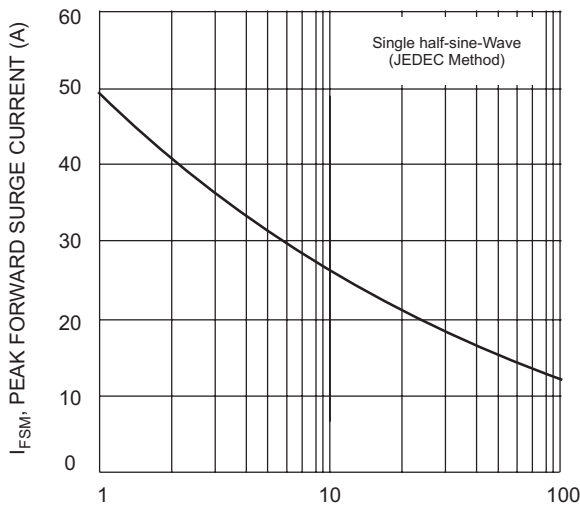
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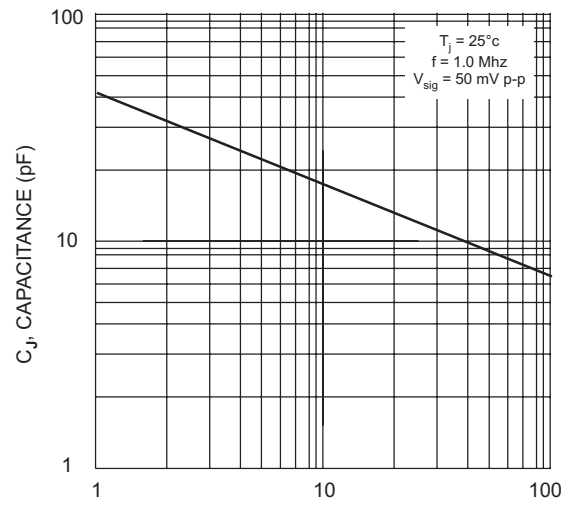
T_A , AMBIENT TEMPERATURE (°C)
Fig. 1 Output Current Derating Curve



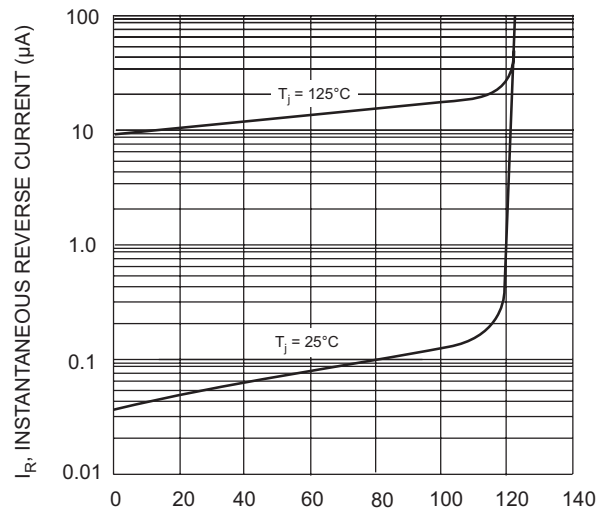
V_F , INSTANTANEOUS FORWARD VOLTAGE (V)
Fig. 2 Typ Forward Characteristics (per element)



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)

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