1.5A SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

Features and Benefits

- Glass Passivated Die Construction
- Low Forward Voltage Drop, High Current Capability
- Surge Overload Rating to 50A Peak
- Designed for Surface Mount Applications
- UL Listed Under Recognized Component Index, File Number E94661
- **Lead Free Finish, RoHS Compliant (Date Code 0532+) (Note 1)**

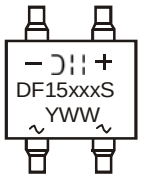
Mechanical Data

- Case: DF-S
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020
- Terminals: Finish - Tin. Solder Plated Leads, Solderable per MIL-STD-202, Method 208 (e3)
- Polarity: As Marked on Case
- Marking: Type Number
- Weight: 0.38 grams (approximate)

Ordering Information (Note 2)

Device	Packaging	Shipping
DF15xxxS-T	DF-S	1500/Tape & Reel
DF15xxxS	DF-S	50 per Tube

Marking Information



DH = Manufacturers' code marking
DF15xxxS = Product type marking code
ex: DF1510S
YWW = Date code marking
Y = Last digit of year (ex: 2 for 2002)
WW = Week code (01 to 53)

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 15005S	DF 1501S	DF 1502S	DF 1504S	DF 1506S	DF 1508S	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	580	700	V
Average Forward Rectified Current @ T_A = 40°C	I_O	1.5							A
Non-Repetitive Peak Forward Surge Current, 8.3 ms Single Half Sine-Wave Superimposed on Rated Load	I_{FSM}	50							A
Forward Voltage (per element) @ I_F = 1.5A	V_{FM}	1.1							V
Peak Reverse Current at Rated @ T_A = 25°C DC Blocking Voltage (per element) @ T_A = 125°C	I_{RM}	10 500							µA
I^2t Rating for Fusing (t<8.3ms)	I^2t	10.4							A^2s
Typical Total Capacitance per element (Note 3)	C_T	25							pF
Typical Thermal Resistance, Junction to Ambient (Note 4)	$R_{\theta JA}$	40							°C/W
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +150							°C

Notes:
1. EU Directive 2002/95/EC (RoHS) & 2011/65/EU (RoHS 2). All applicable RoHS exemptions applied
2. For packaging details, visit our website at http://www.diodes.com.
3. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.
4. Thermal resistance, junction to ambient, measured on PC board with 5.0mm^2 (0.03mm thick) land areas.

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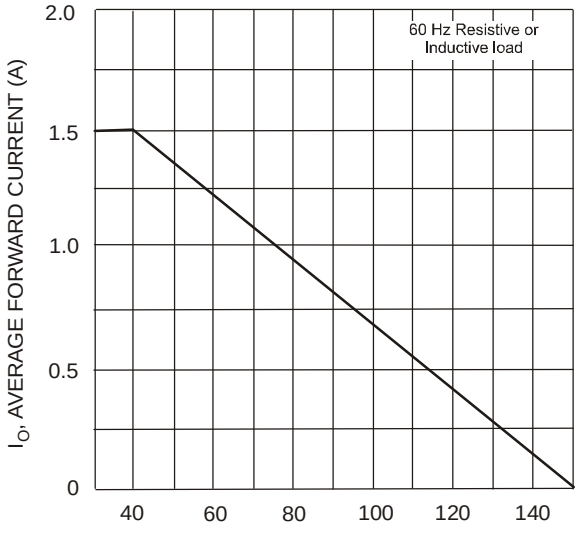


Fig. 1 Output Current Derating Curve

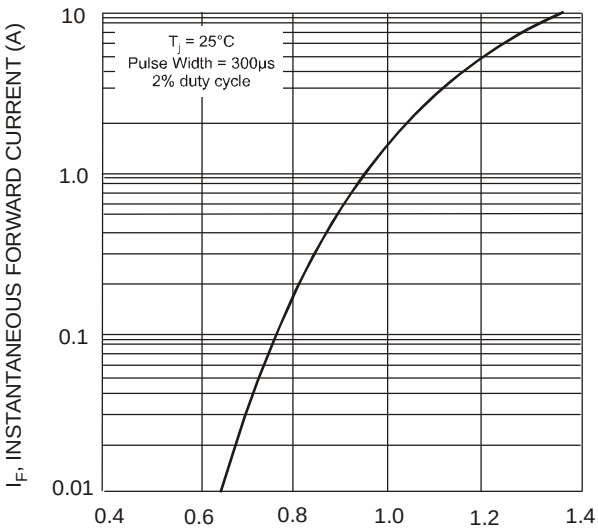


Fig. 2 Typical Forward Characteristics (per element)

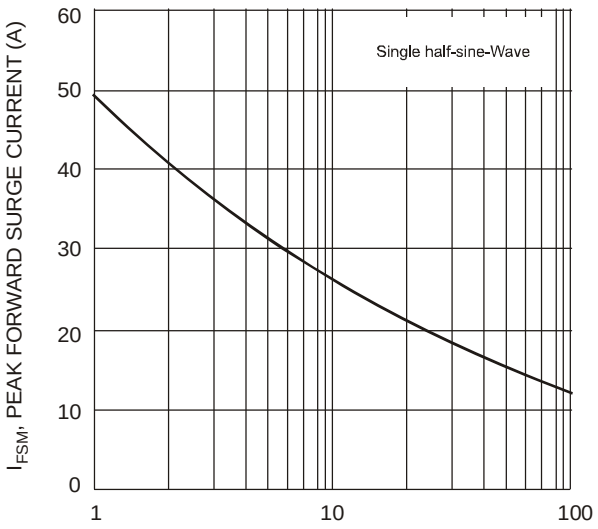


Fig. 3 Max Non-Repetitive Peak Forward Surge Current

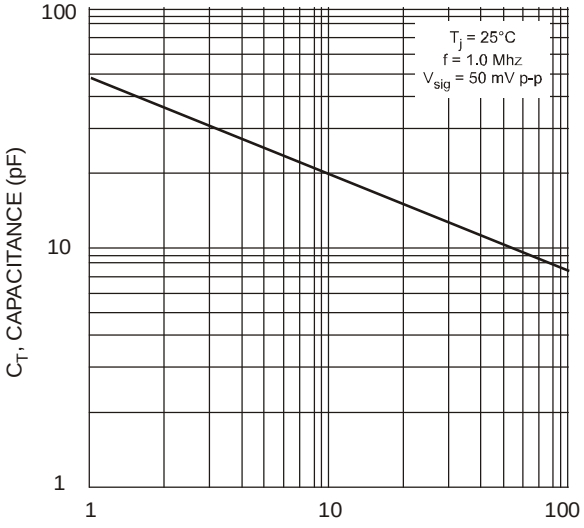


Fig. 4 Typical Total Capacitance (per element)

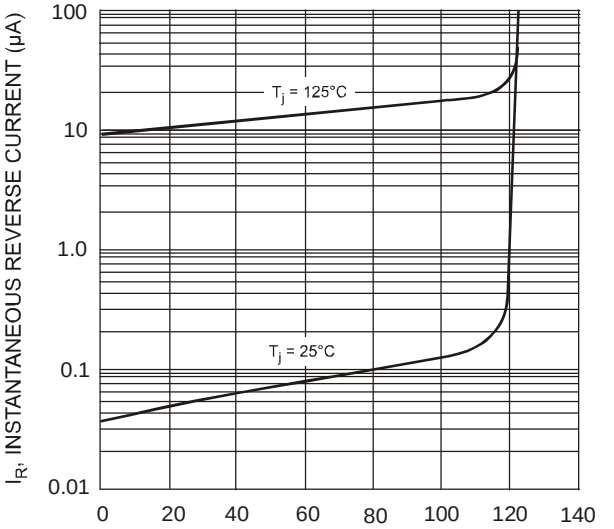
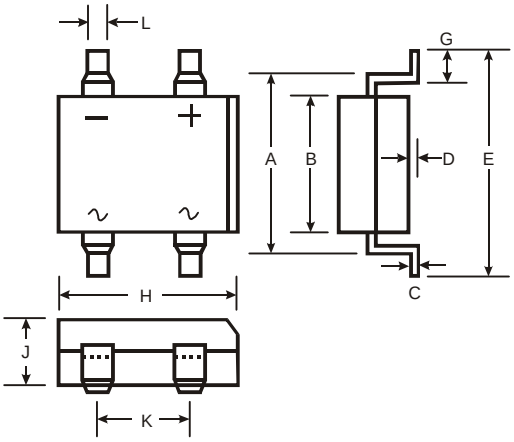


Fig. 5 Typical Reverse Characteristics (per element)

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Package Outline Dimensions



DF-S		
Dim	**Min**	**Max**
A	7.40	7.90
B	6.20	6.50
C	0.22	0.30
D	0.076	0.33
E	—	10.40
G	1.02	1.53
H	8.13	8.51
J	2.40	2.60
K	5.00	5.20
L	1.00	1.20
All Dimensions in mm		

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