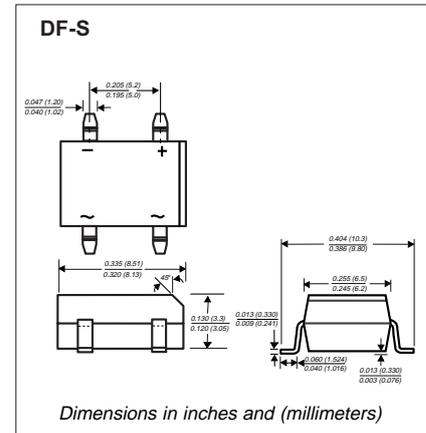


# DF15005S - DF1510S

## ■ Features

- Glass passivated chip junctions
- Low Forward Voltage Drop, High Current Capability
- Surge Overload Rating to 50A Peak



## ■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	DF15005S	DF1501S	DF1502S	DF1504S	DF1506S	DF1508S	DF1510S	Unit
Peak Repetitive Reverse Voltage	$V_{RMM}$								
Working Peak Reverse Voltage	$V_{RWM}$	50	100	200	400	600	800	1000	V
DC Blocking Voltage	$V_{DC}$								
RMS Reverse Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Average Forward Rectified Current $T_A = 40^\circ C$	$I_o$	1.5							A
Non-Repetitive Peak Forward Surge Current, 8.3 ms Single half-sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	50							A
Forward Voltage (per element) @ $I_F = 1.5A$	$V_F$	1.1							V
Reverse Current(per element) @ Rated $V_R$ , $T_A = 25^\circ C$ $T_A = 125^\circ C$	$I_R$	10 500							$\mu A$
Rating for fusing ( $t < 8.3ms$ )	$I^2t$	10							$A^2s$
Typical Total Capacitance (per element) (Note 1)	$C_J$	25							pF
Typical Thermal Resistance, Junction to Ambient (Note 2)	$R_{\theta JA}$	40							$^\circ C/W$
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 to +150							$^\circ C$

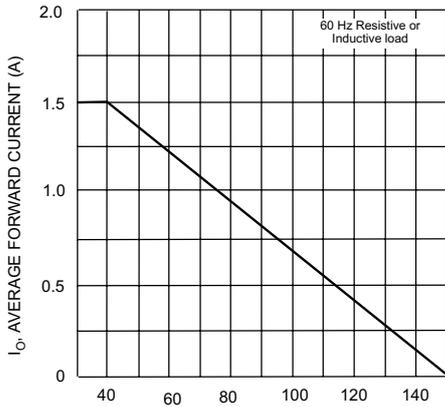
Notes: 1. Measured at 1.0 MHz and Applied Reverse Voltage of 4.0V DC.

2. Device mounted on PCB with  $0.5 \times 0.5''$  ( $13 \times 13mm$ ).

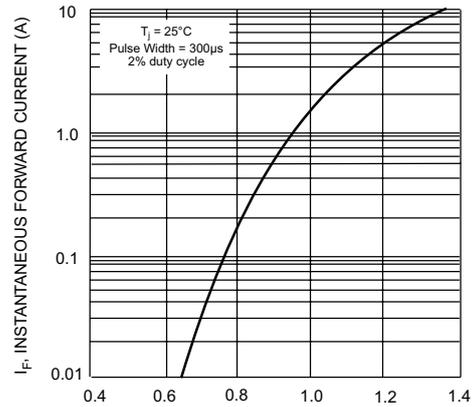


# DF15005S - DF1510S

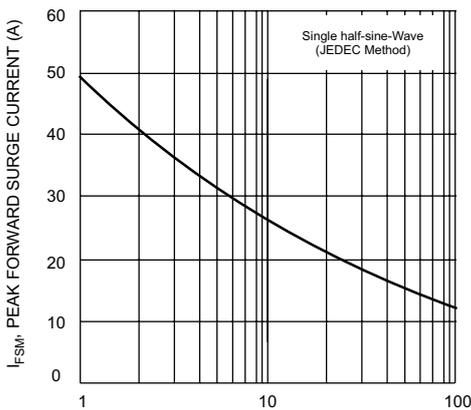
## Typical Characteristics



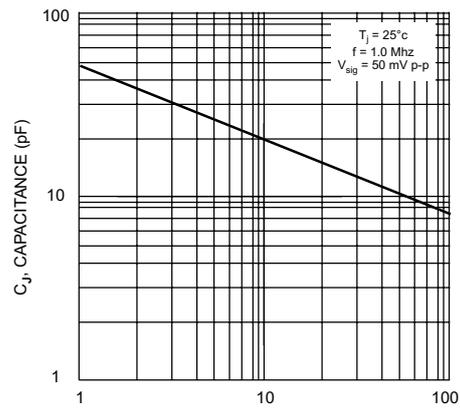
$T_A$ , AMBIENT TEMPERATURE (°C)  
Fig. 1 Output Current Derating Curve



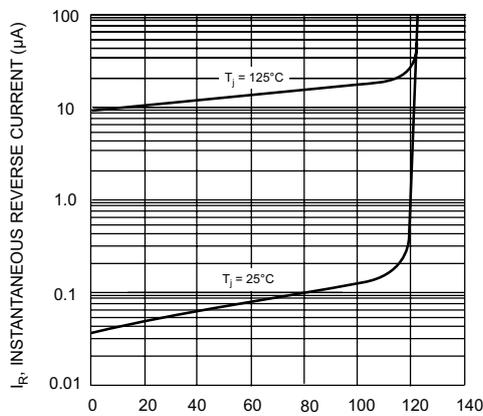
$V_F$ , INSTANTANEOUS FORWARD VOLTAGE (V)  
Fig. 2 Typ Forward Characteristics (per element)



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)