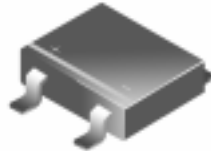


## DF005S - DF10S

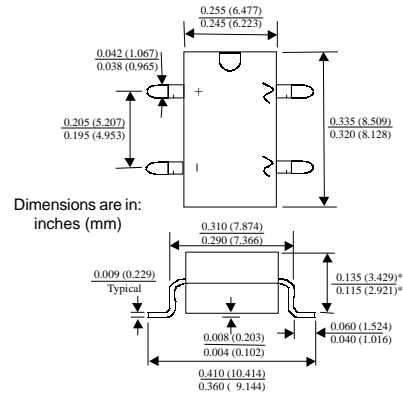
### Features

- Surge overload rating: 50 amperes peak.
- Glass passivated junction.
- Low leakage.



SDIP

LOW PROFILE ALSO AVAILABLE  
BODY -- 0.102 (2.591)\*  
0.095 (2.413)\*



## 1.5 Ampere Bridge Rectifiers

### Absolute Maximum Ratings\*

$T_A = 25^\circ\text{C}$  unless otherwise noted

Symbol	Parameter	Value	Units
$I_O$	Average Rectified Current @ $T_A = 40^\circ\text{C}$	1.5	A
$i_{f(\text{surge})}$	Peak Forward Surge Current 8.3 ms single half-sine-wave Superimposed on rated load (JEDEC method)	50	A
$P_D$	Total Device Dissipation Derate above $25^\circ\text{C}$	3.1 25	W mW/ $^\circ\text{C}$
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient,** per leg	40	$^\circ\text{C}/\text{W}$
$T_{\text{stg}}$	Storage Temperature Range	-55 to +150	$^\circ\text{C}$
$T_J$	Operating Junction Temperature	-55 to +150	$^\circ\text{C}$

\*These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

\*\*Device mounted on PCB with  $0.5 \times 0.5"$  ( $13 \times 13$  mm).

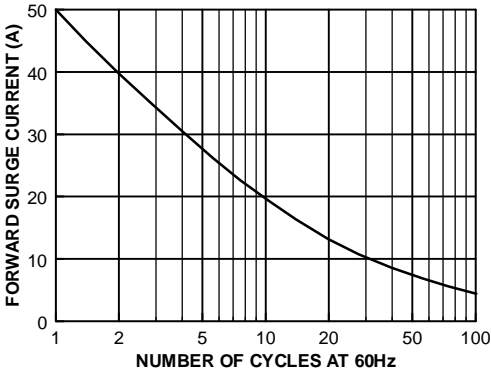
### Electrical Characteristics

$T_A = 25^\circ\text{C}$  unless otherwise noted

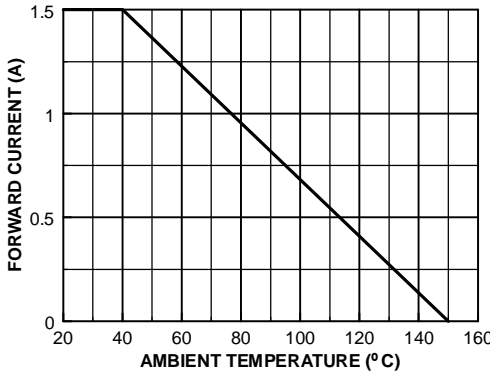
Parameter	Device							Units
	005S	01S	02S	04S	06S	08S	10S	
Peak Repetitive Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	35	70	140	280	420	560	700	V
DC Reverse Voltage (Rated $V_R$ )	50	100	200	400	600	800	1000	V
Maximum Reverse Leakage, total bridge @ rated $V_R$ $T_A = 25^\circ\text{C}$ $T_A = 125^\circ\text{C}$	5.0 500							$\mu\text{A}$ $\mu\text{A}$
Maximum Forward Voltage Drop, per bridge @ 1.0 A	1.1							V
$I^2t$ rating for fusing $t < 8.35$ ms	10							$\text{A}^2\text{Sec}$
Typical Junction Capacitance, per leg $V_R = 4.0$ V, $f = 1.0$ MHz	25							pF

Typical Characteristics

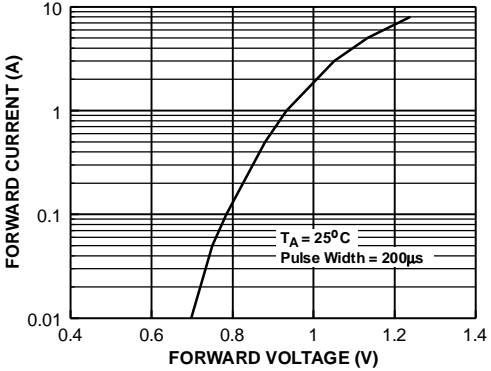
Non-Repetitive Surge Current



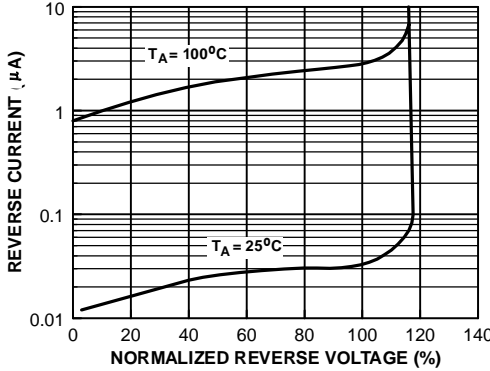
Output Rectified Current



Forward Characteristics



Reverse Characteristics



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FACT™	QS™
FACT Quiet Series™	Quiet Series™
FAST®	SuperSOT™-3
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GTO™	SuperSOT™-8
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