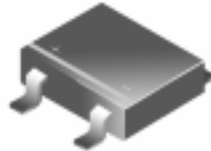


DF005S - DF10S

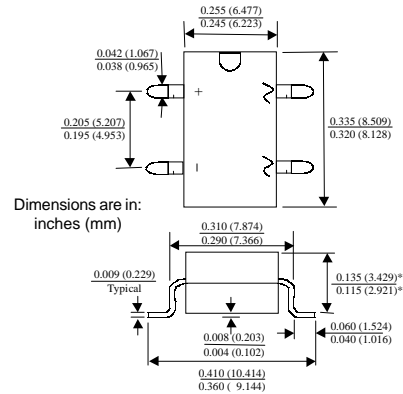
Features

- 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°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_{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 x 0.5" (13 x 13 mm).

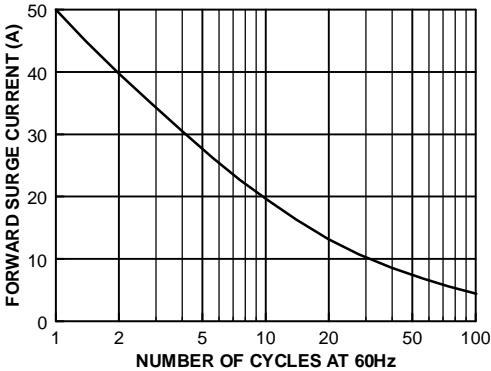
Electrical Characteristics

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

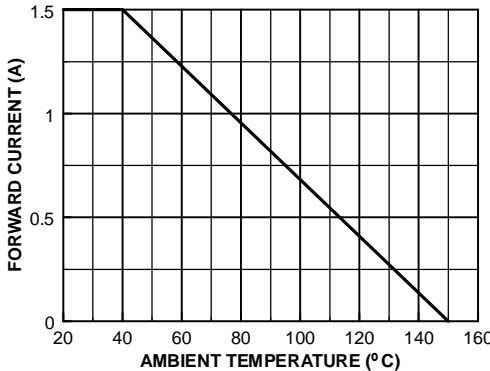
Parameter	Device							Units
	005S	01S	02S	04S	06S	08S	10S	
Peak Repetitive Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	35	70	140	280	420	560	700	V
DC Reverse Voltage (Rated V_R)	50	100	200	400	600	800	1000	V
Maximum Reverse Leakage, total bridge @ rated V_R $T_A =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

Typical Characteristics

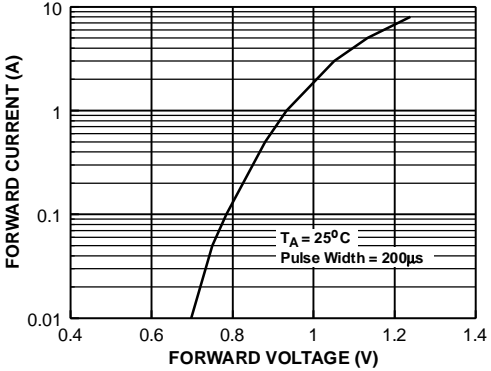
Non-Repetitive Surge Current



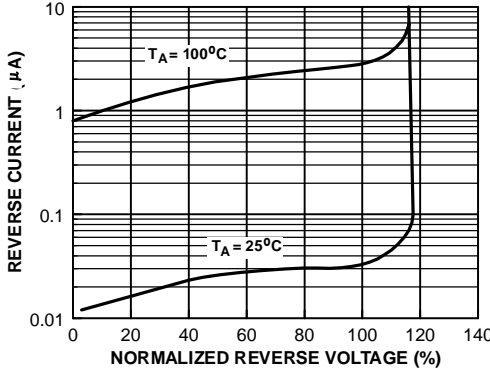
Output Rectified Current



Forward Characteristics



Reverse Characteristics



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FACT™	QS™
FACT Quiet Series™	Quiet Series™
FAST®	SuperSOT™-3
FASTr™	SuperSOT™-6
GTO™	SuperSOT™-8
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PRODUCT STATUS DEFINITIONS

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No Identification Needed	Full Production	This datasheet contains final specifications. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
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