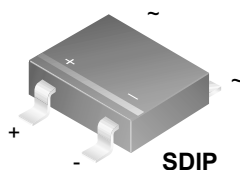


DF005S - DF10S Bridge Rectifiers

Features

- Surge overload rating: 50 amperes peak.
- Glass passivated junction.
- Low leakage.
- UL certified, UL #E111753.



Absolute Maximum Ratings * T_a = 25°C unless otherwise noted

Symbol	Parameter	Value							Units
		005S	01S	02S	04S	06S	08S	10S	
V _{RRM}	Maximum Repetitive Reverse Voltage	50	100	200	400	600	800	1000	V
V _{RMS}	Maximum RMS Bridge Input Voltage	35	70	140	280	420	560	700	V
V _R	DC Reverse Voltage (Rated V _R)	50	100	200	400	600	800	1000	V
I _{F(AV)}	Average Rectified Forward Current @ T _A = 40°C	1.5							A
I _{FSM}	Non-Repetitive Peak Forward Surge Current 8.3ms Single Half-Sine-Wave	50							A
T _{STG}	Storage Temperature Range	-55 to +150							°C
T _J	Operating Junction Temperature	-55 to +150							°C

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

Thermal Characteristics

Symbol	Parameter	Value	Units
P _D	Power Dissipation	3.1	W
R _{θJA}	Thermal Resistance, Junction to Ambient, * per leg	40	°C/W

* Device mounted on PCB with 0.5 × 0.5" (13 × 13mm).

Electrical Characteristics T_C = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
V _F	Forward Voltage, per element @ 1.0A	1.1	V
I _R	Reverse Current, per element @ Rated V _R T _A = 25°C T _A = 125°C	50 500	μA μA
	I ² t Rating for Fusing t < 8.35ms	10	A ² s
C _T	Total Capacitance, per leg V _R = 4.0v, f = 1.0MHz	25	pF

Typical Performance Characteristics

Figure 1. Non-Repetitive Surge Current

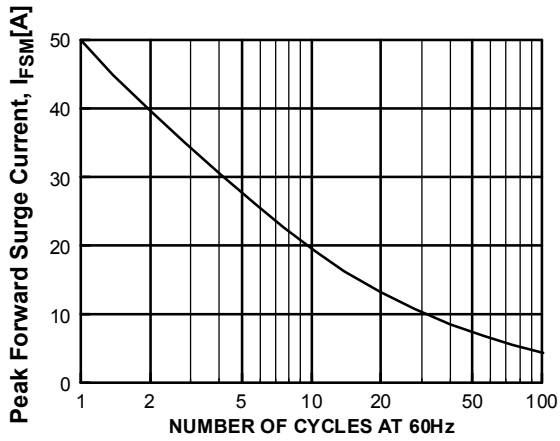


Figure 2. Forward Current Derating Curve

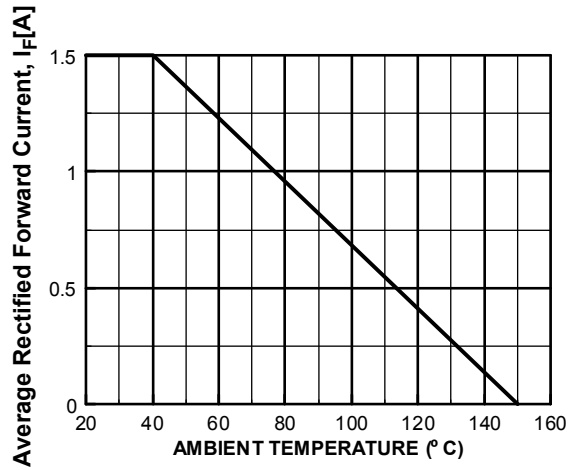


Figure 3. Forward Voltage Characteristics

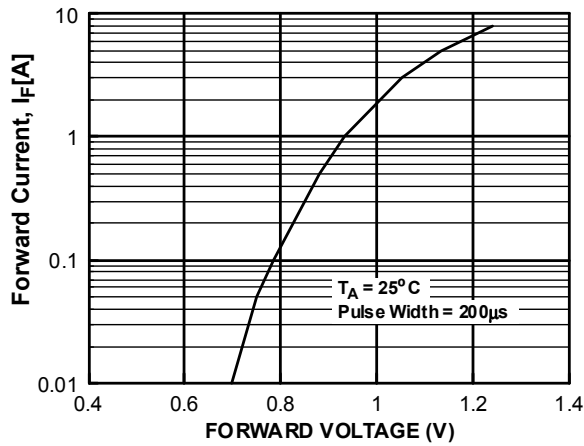
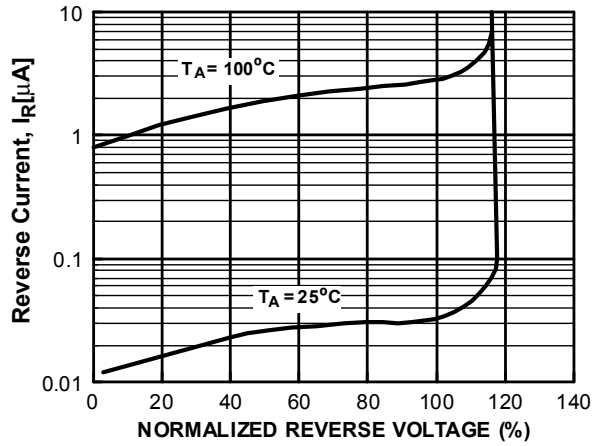


Figure 4. Reverse Current vs Reverse Voltage



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FACT Quiet Series™		OCXPro™	RapidConnect™	UHC™
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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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