

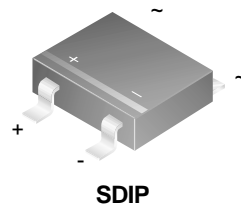


DF005S - DF10S

DF005S - DF10S

Features

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



Bridge Rectifiers

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 8.3 ms 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 x 0.5" (13 x 13 mm).

Electrical Characteristics T_A = 25°C unless otherwise noted

Symbol	Parameter	Device	Units
V _F	Forward Voltage, per bridge @ 1.0 A	1.1	V
I _R	Reverse Current, total bridge @ rated V _R T _A = 25°C T _A = 125°C	5.0	μA
		500	μA
	I ² t rating for fusing t < 8.35 ms	10	A ² s
C _T	Total Capacitance, per leg V _R = 4.0 V, f = 1.0 MHz	25	pF

Typical Characteristics

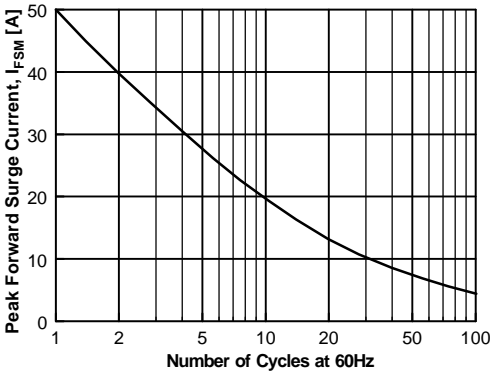


Figure 1. Non-Repetitive Surge Current

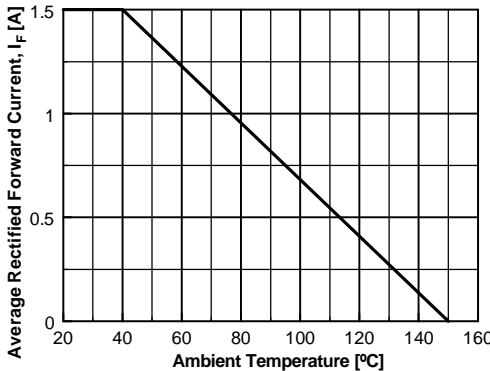


Figure 2. Forward Current Derating Curve

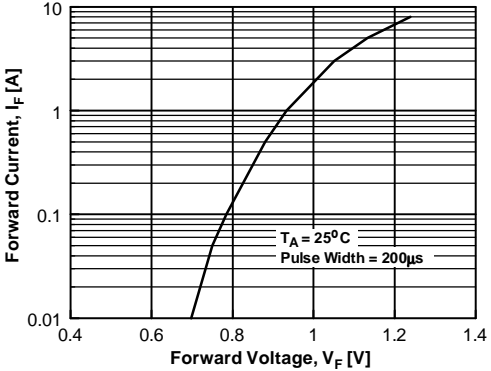


Figure 3. Forward Voltage Characteristics

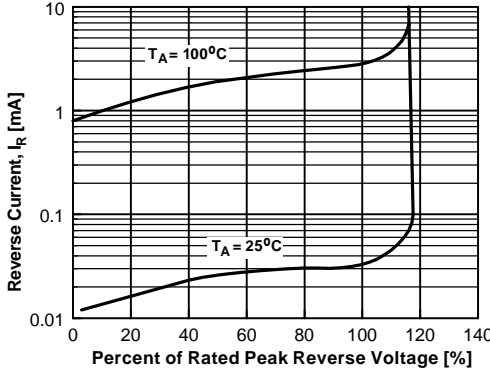


Figure 4. Reverse Current vs Reverse Voltage

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