

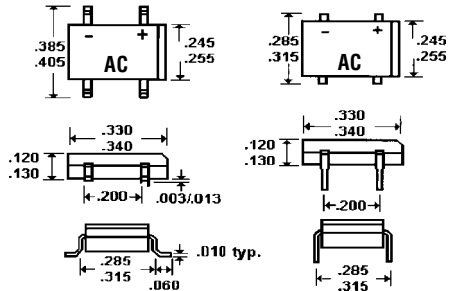
# 1.0 Amp FAST RECOVERY SINGLE PHASE SILICON BRIDGE

**RDF005 . . . 08 Series**

## Description



## Mechanical Dimensions



Add Suffix "S" for SMD.  
Example: RDF-04M"S" = 400V/1 Amp SMD Part

**Mechanical Data:** Terminal Leads - Solderable per Mil Std. 202. Polarity - Molded on Case. Mounting Position - Any. Weight - 0.04 Ounces, 1 Gram.

## Features

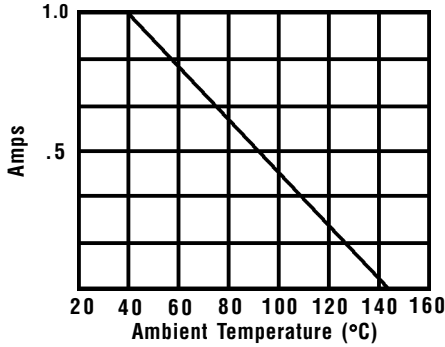
- **COMPACT SIZE**
- **LOW LEAKAGE CURRENT**
- **50 AMP SURGE OVERLOAD RATING**
- **UNDERWRITERS LABORATORIES RECOGNIZED**
- **MEETS UL SPECIFICATION 94V-0**

Electrical Characteristics @ 25°C.	<i>RDF005 . . . 08 Series</i>						Units	
Maximum Ratings	RDF005	RDF01	RDF02	RDF04	RDF06	RDF08		
Peak Repetitive Reverse Voltage... $V_{RRM}$	50	100	200	400	600	800	Volts	
RMS Reverse Voltage... $V_{R(rms)}$	35	70	140	280	420	560	Volts	
DC Blocking Voltage... $V_{DC}$	50	100	200	400	600	800	Volts	
Average Forward Rectified Current... $I_{F(av)}$ $T_A = 40^\circ\text{C}$				1.0			Amps	
Non-Repetitive Peak Forward Surge Current... $I_{FSM}$ 8.3 mS Single ½ Sine Wave Imposed on Rated Load				50			Amps	
Point Rating for Fusing...(T < 8.3 mS)				5.0			A <sup>2</sup> S	
Forward Voltage... $V_F$ Bridge Element @ 1.0 Amp				1.3			Volts	
DC Reverse Current... $I_R$ @ Rated DC Blocking Voltage			$T_J = 25^\circ\text{C}$	10			$\mu\text{A}$	
			$T_J = 125^\circ\text{C}$	1.0			mA	
Reverse Recovery Time... $t_{RR}$ (Note 1)	$T_C = 25^\circ\text{C}$	200	200	200	350	350	350	nS
Typical Thermal Resistance... $R_{\theta JC}$				40			°C/W	
Operating & Storage Temperature Range... $T_J, T_{STRG}$				-55 to 150			°C	

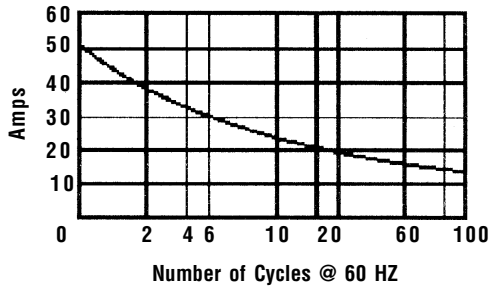
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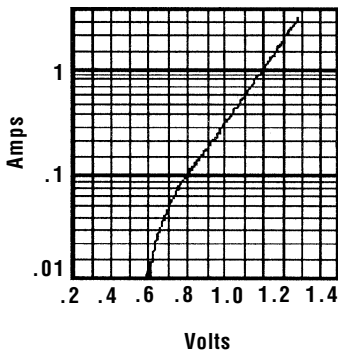
**Forward Current Derating Curve**



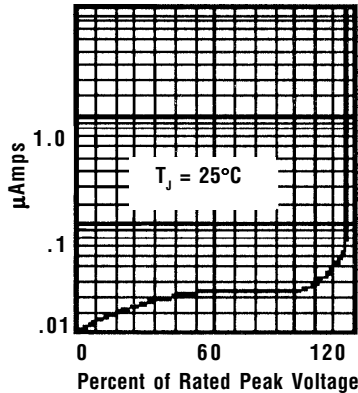
**Non-Repetitive Peak Forward Surge Current**



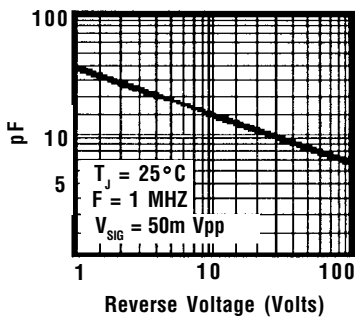
**Typical Instantaneous Forward Characteristics**



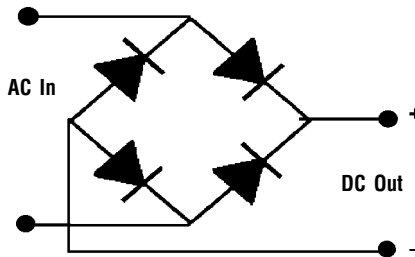
**Typical Reverse Characteristics**



**Typical Junction Capacitance**



**Electrical Description**



Ratings at 25 Deg. C ambient temperature unless otherwise specified.

Single Phase Half Wave, 60 HZ Resistive or Inductive Load.

For Capacitive Load, Derate Current by 20%.

**NOTES:** 1. Reverse Recovery Cond.,  $I_F = .5\text{A}$ ,  $I_R = 1.0\text{A}$ ,  $I_{RR} = .25\text{A}$ .