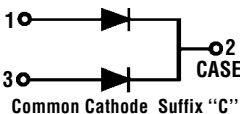
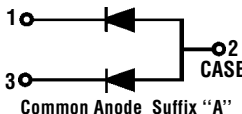
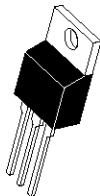
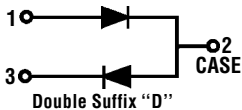


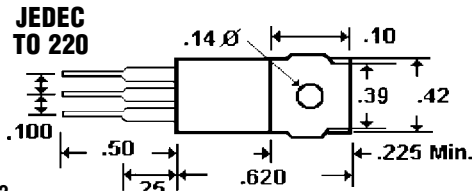


**VF16C05 . . . 60 Series**

## Description



## Mechanical Dimensions



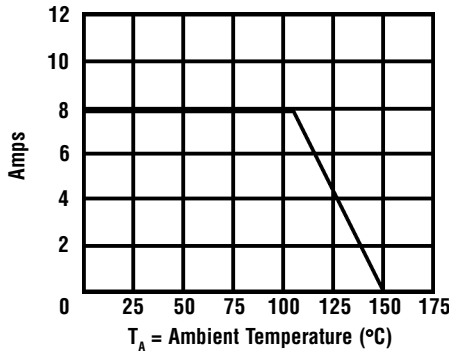
## Features

- LOW FORWARD VOLTAGE
- HIGH SURGE CAPABILITY
- SUPERFAST RECOVERY TIME
- MEETS UL SPECIFICATION 94V-0

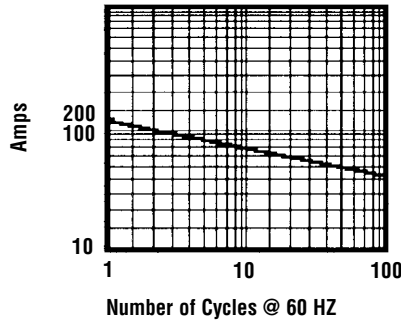
Electrical Characteristics @ 25°C.	VF16C05 . . . 60 Series								Units
Maximum Ratings	05	10	15	20	30	40	50	60	
Peak Repetitive Reverse Voltage... $V_{RRM}$	50	100	150	200	300	400	500	600	Volts
Working Peak Reverse Voltage... $V_{RWM}$	50	100	150	200	300	400	500	600	Volts
DC Blocking Voltage... $V_{DC}$	50	100	150	200	300	400	500	600	Volts
RMS Reverse Voltage... $V_{R(rms)}$	35	70	105	140	210	280	350	420	Volts
Average Forward Rectified Current... $I_{F(av)}$ $T_C = 150^\circ\text{C}$ @ Rated $V_{DC}$					8.0				Amps
Repetitive Peak Forward Surge Current... $I_{FM}$ @ Rated $V_{DC}$ , Square Wave, 20 KHZ, $T_C = 150^\circ\text{C}$					16				Amps
Non-Repetitive Peak Forward Surge Current... $I_{FSM}$ @ Rated Load Cond., 1/2 Wave, Single Phase, 60HZ					125				Amps
Forward Voltage... $V_f$ @ $I_F = 8$ Amps, PW = 300 $\mu$ S			$T_C = 150^\circ\text{C}$	< ..... 1.0 ..... >		< ... 1.1 ... >		< ..... 1.3 ..... >	Volts
			$T_C = 25^\circ\text{C}$	< ..... 1.4 ..... >		< ... 1.4 ... >		< ..... 1.6 ..... >	Volts
DC Reverse Current... $I_R$ @ Rated DC Blocking Voltage			$T_C = 150^\circ\text{C}$	< ..... 250 ..... >		< ..... 500 ..... >			$\mu$ Amps
			$T_C = 25^\circ\text{C}$	< ..... 5.0 ..... >		< ..... 10 ..... >			$\mu$ Amps
Reverse Recovery Time... $t_{RR}$ $I_F = 1.0$ Amp, $di/dt = 50$ Amps/ $\mu$ s			< ..... 50 ..... >		< ..... 75 ..... >				nS
Operating & Storage Temperature Range... $T_J, T_{STRG}$	-65 to 150								$^\circ\text{C}$



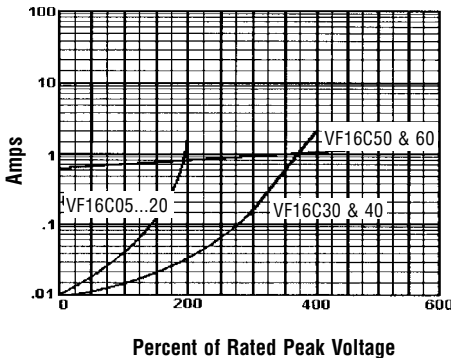
**Forward Current Derating Curve**



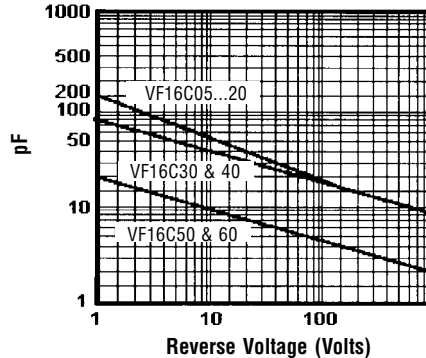
**Non-Repetitive Peak Forward Surge Current**



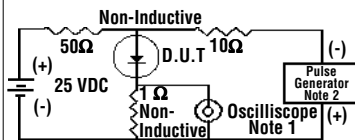
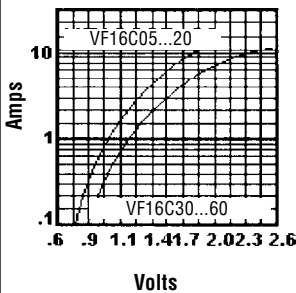
**Typical Reverse Characteristics**



**Typical Junction Capacitance**



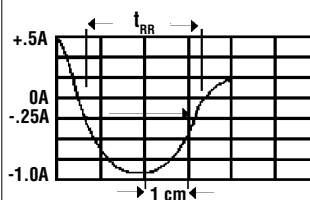
**Typical Instantaneous Forward Characteristics**



Notes:

1. Rise Time = 7 nS Max.  
Impedance = 1 megohm, 22 pF
2. Rise Time = 10 nS Max.  
Source Impedance = 50 Ohms

**Reverse Recovery Characteristics**



Time Base Set @ 50/100nS/cm

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%.