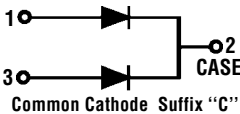
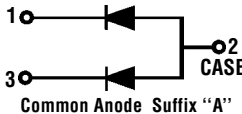
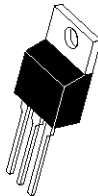
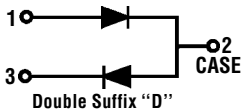


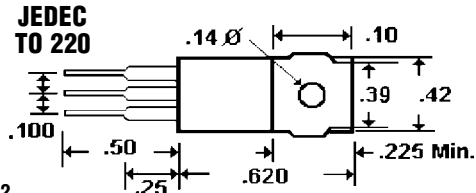


VF16C05 . . . 60 Series

Description



Mechanical Dimensions



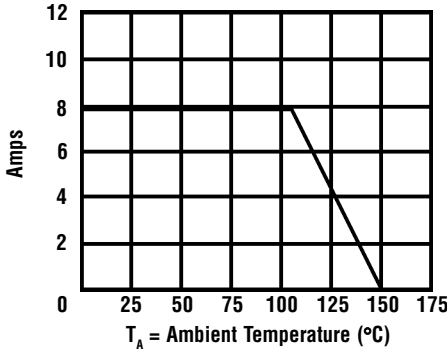
Features

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

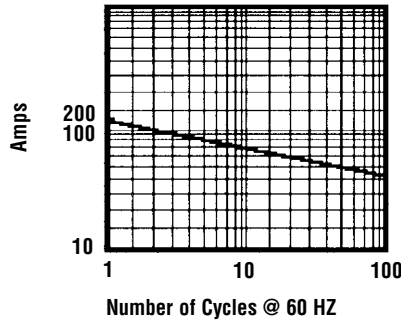
Electrical Characteristics @ 25°C.	VF16C05 . . . 60 Series								Units
Maximum Ratings	05	10	15	20	30	40	50	60	
Peak Repetitive Reverse Voltage... V_{RRM}	50	100	150	200	300	400	500	600	Volts
Working Peak Reverse Voltage... V_{RWM}	50	100	150	200	300	400	500	600	Volts
DC Blocking Voltage... V_{DC}	50	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 μ 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 >		μ Amps		
	$T_C = 25^\circ\text{C}$	< 5.0 >			< 10 >		μ Amps		
Reverse Recovery Time... t_{RR} $I_f = 1.0$ Amp, $di/dt = 50$ Amps/ μ s	< 50 >				< 75 ... >			nS	
Operating & Storage Temperature Range... T_J, T_{STRG}	-65 to 150								$^\circ\text{C}$



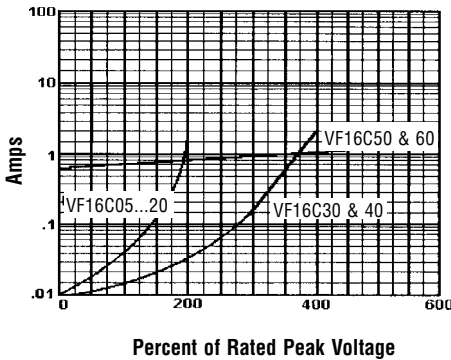
Forward Current Derating Curve



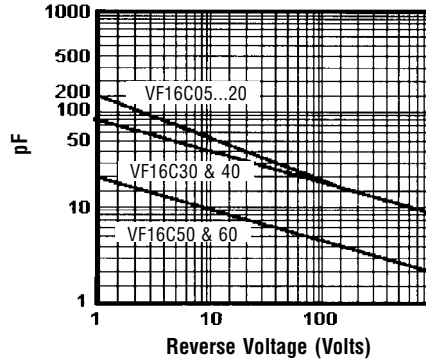
**Non-Repetitive
Peak Forward Surge Current**



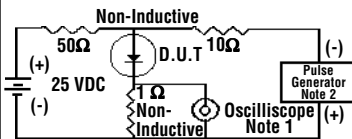
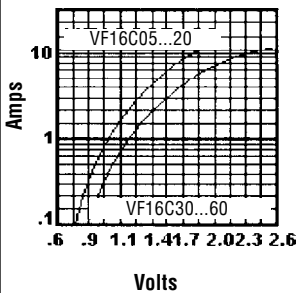
Typical Reverse Characteristics



Typical Junction Capacitance



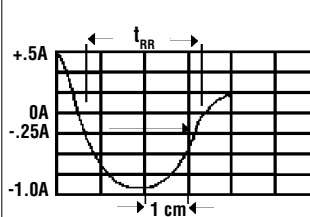
**Typical Instantaneous
Forward Characteristics**



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%.