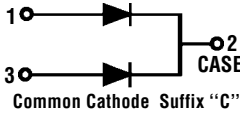
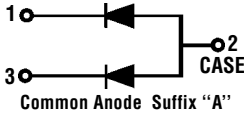
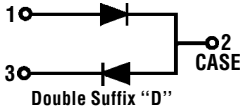
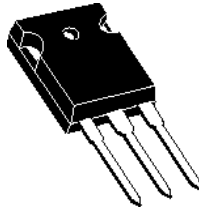




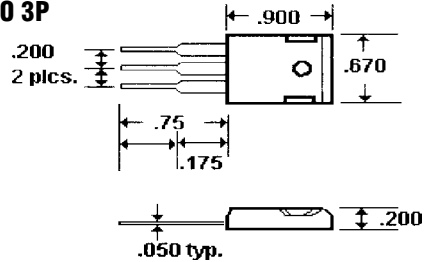
VF30C05 . . . 60 Series

Description



Mechanical Dimensions

TO 3P



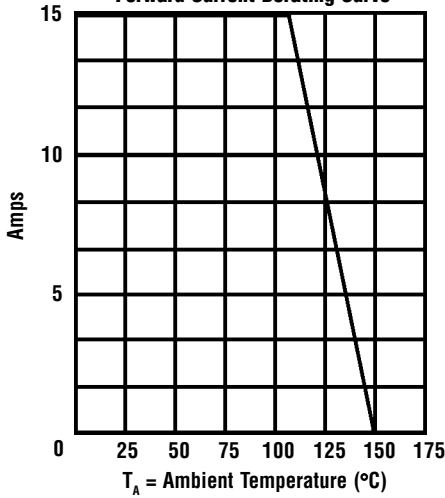
Features

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

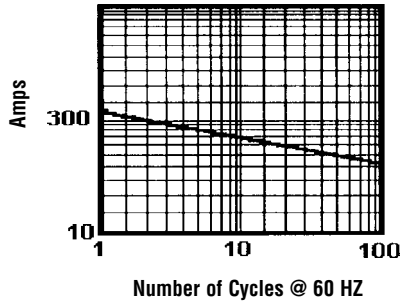
Electrical Characteristics @ 25°C.	VF30C05 . . . 60 Series								Units
Maximum Ratings	05	10	15	20	30	40	50	60	
Peak Repetitive Reverse Voltage... V_{RRM}	50	100	150	200	300	400	500	600	Volts
Working Peak Reverse Voltage... V_{RWM}	50	100	150	200	300	400	500	600	Volts
DC Blocking Voltage... V_{DC}	50	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... $I_{F(av)}$ $T_C = 150^\circ\text{C} @ \text{Rated } V_{DC}$					15				Amps
					30				Amps
Repetitive Peak Forward Surge Current... I_{FM} @ Rated V_{DC} , Square Wave, 20 KHZ, $T_C = 150^\circ\text{C}$					30				Amps
Non-Repetitive Peak Forward Surge Current... I_{FSM} @ Rated Load Cond., 1/2 Wave, Single Phase, 60HZ					300				Amps
Forward Voltage... V_F @ $I_F = 15 \text{ Amps}$, PW = 300 μs	$T_C = 150^\circ\text{C}$	< 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 >		μAmps		
	$T_C = 25^\circ\text{C}$	< 5.0 >			< 10 >		μAmps		
Reverse Recovery Time... t_{RR} $I_F = 1.0 \text{ Amp}$, di/dt = 50 Amps/ μs	< 50 >				< 75 ... >			nS	
Operating & Storage Temperature Range... T_J, T_{STRG}	-65 to 175								$^\circ\text{C}$



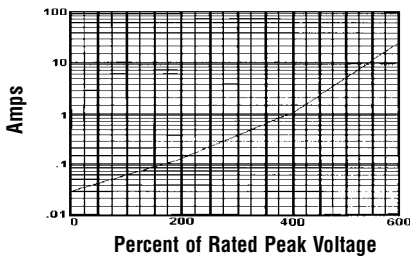
Forward Current Derating Curve



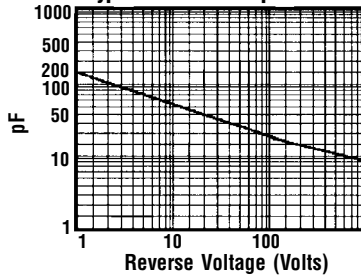
Non-Repetitive Peak Forward Surge Current



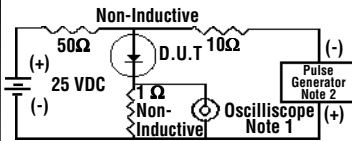
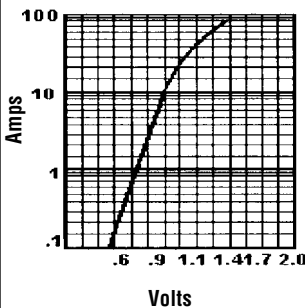
Typical Reverse Characteristics



Typical Junction Capacitance



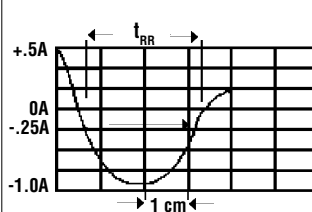
Typical Instantaneous Forward Characteristics



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%.