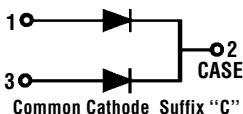
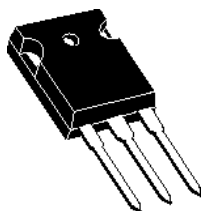
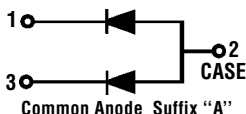
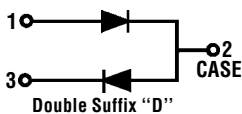
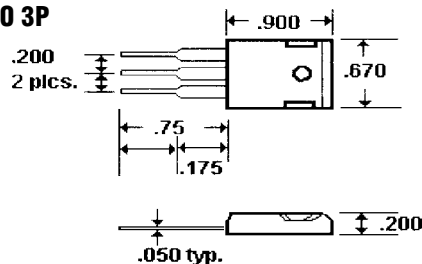


**Description****Mechanical Dimensions****TO 3P****Features**

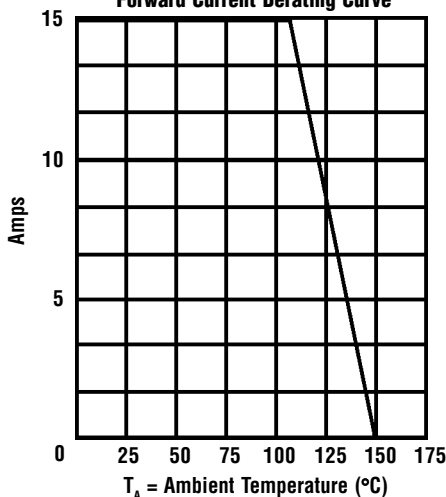
- **LOW FORWARD VOLTAGE**
- **HIGH SURGE CAPABILITY**

- **SUPERFAST RECOVERY TIME**
- **MEETS UL SPECIFICATION 94V-0**

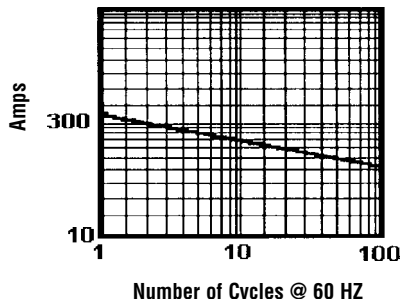
Electrical Characteristics @ 25°C.	VF30C05 . . . 60 Series								Units
Maximum Ratings	05	10	15	20	30	40	50	60	
Peak Repetitive Reverse Voltage... V_{RRM}	50	100	150	200	300	400	500	600	Volts
Working Peak Reverse Voltage... V_{RWM}	50	100	150	200	300	400	500	600	Volts
DC Blocking Voltage... V_{DC}	50	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... $I_{F(av)}$ $T_C = 150^\circ\text{C}$ @ 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 @ $I_F = 15$ 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 175	.....	.....	.....	.....	.....	.....	$^\circ\text{C}$



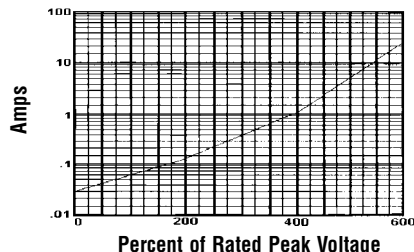
Forward Current Derating Curve



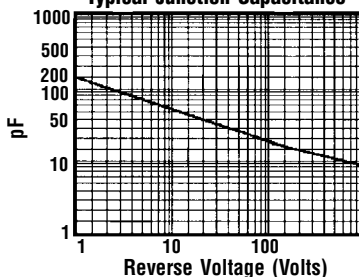
Non-Repetitive
Peak Forward Surge Current



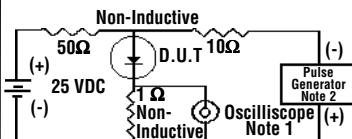
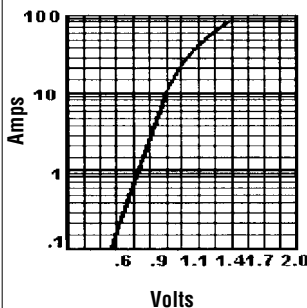
Typical Reverse Characteristics



Typical Junction Capacitance



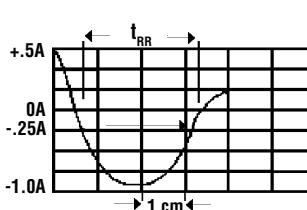
Typical Instantaneous
Forward Characteristics



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%.