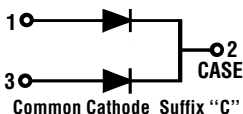
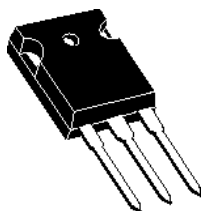
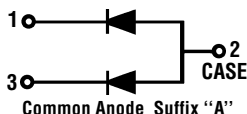
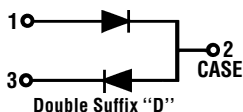


30 Amp ULTRAFAST SWITCHMODE POWER PLASTIC RECTIFIERS

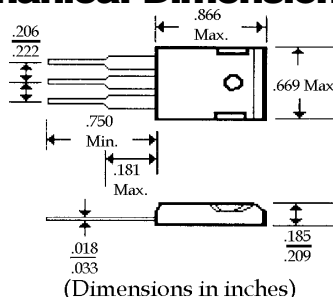
UF30C05 . . . 60 Series

Description



Mechanical Dimensions

T0-3P



Features

- LOW FORWARD VOLTAGE
- HIGH SURGE CAPABILITY

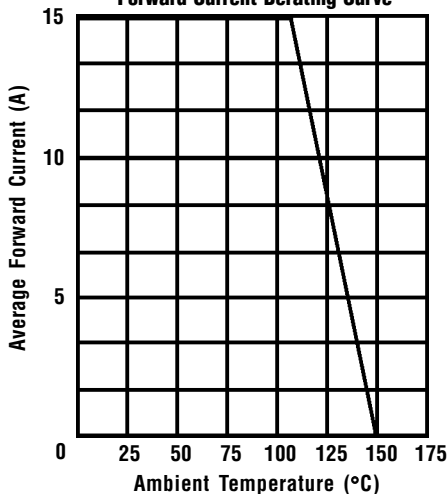
- ULTRAFAST RECOVERY TIME
- MEETS UL SPECIFICATION 94V-0

UF30C05 . . . 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... $I_{F(av)}$	.....				15	.....			Amps
$T_C = 150^{\circ}\text{C}$ @ Rated V_{DC}	.....				30	.....			Amps
Repetitive Peak Forward Surge Current... I_{FM}	.....				30	.....			Amps
@ Rated V_{DC} , Square Wave, 20 kHz, $T_C = 150^{\circ}\text{C}$									
Non-Repetitive Peak Forward Surge Current... I_{FSM}	.....				300	.....			Amps
@ Rated Load Cond., 1/2 Wave, Single Phase, 60Hz									
Operating & Storage Temperature Range... T_J , T_{STRG}	.....				-65 to 175	.....			$^{\circ}\text{C}$
Electrical Characteristics									
Maximum Forward Voltage... V_F									
@ $I_F = 15$ Amps, PW = 300 μ s	$T_C = 150^{\circ}\text{C}$	< 0.880 >		< 1.12 ... >		< 1.34 >		Volts	
	$T_C = 25^{\circ}\text{C}$	< 0.975 >		< 1.3 ... >		< 1.5 >		Volts	
Maximum DC Reverse Current... I_R									
@ Rated DC Blocking Voltage	$T_C = 150^{\circ}\text{C}$	.....				500	.....		μ Amps
	$T_C = 25^{\circ}\text{C}$	.....				10	.....		μ Amps
Maximum Reverse Recovery Time... t_{RR}									
$I_F = 1.0$ Amp, di/dt = 50 Amps/ μ s	< 35 >		< 50 >						ns

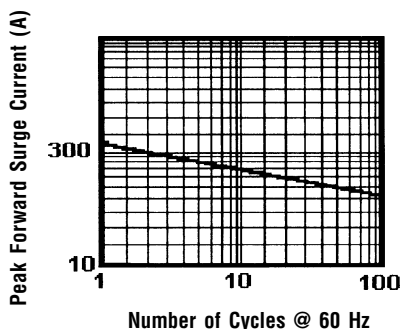
30 Amp ULTRAFAST SWITCHMODE POWER PLASTIC RECTIFIERS

UF30C05 . . . 60 Series

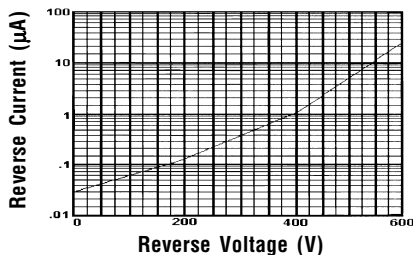
Forward Current Derating Curve



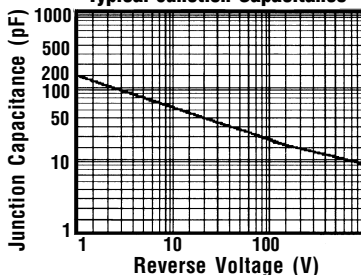
**Non-Repetitive
Peak Forward Surge Current**



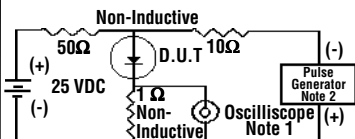
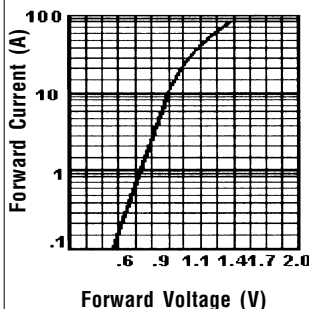
Typical Reverse Characteristics



Typical Junction Capacitance



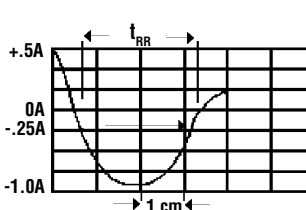
**Typical Instantaneous
Forward Characteristics**



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**



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%.

Time Base Set @ 50/100ns/cm