



Micro Commercial Components  
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# UFT7005 THRU UFT7060

## Features

- Supre Fast switching for high efficiency
- High Surge Capability
- Low Leakage
- Low Forward Voltage Drop
- High Current Capability

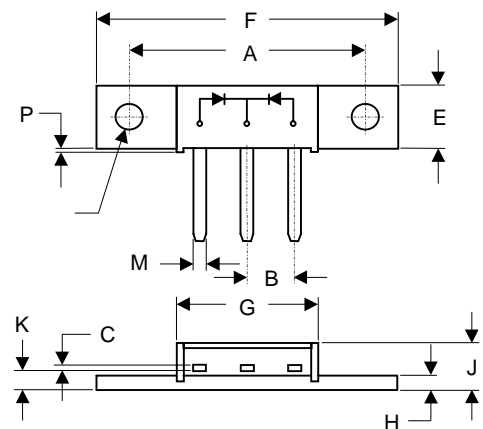
## 70 Amp Supre Fast Recovery Rectifier 50 to 600 Volts

## Maximum Ratings

- Operating Temperature: -65°C to +175°C
- Storage Temperature: -65°C to +175°C

MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
UFT7005	50V	35V	50V
UFT7010	100V	70V	100V
UFT7020	200V	40V	200V
UFT7040	400V	280V	400V
UFT7060	600V	420V	600V

## MINIMOD



## Electrical Characteristics @ 25°C Unless Otherwise Specified

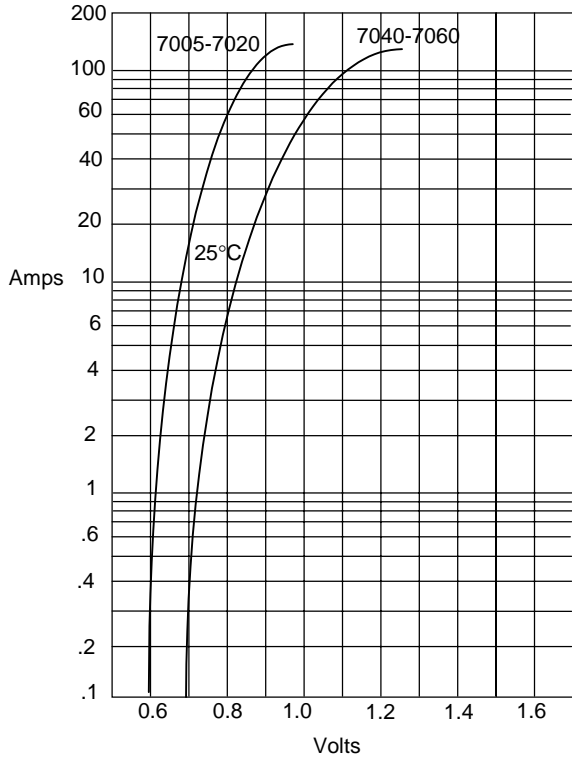
Average Forward Current	$I_{F(AV)}$	70 A	$T_L = 125^\circ\text{C}$
Peak Forward Surge Current 7040 7060	$I_{FSM}$	700A 600 A 500 A	8.3ms, half sine
Maximum Instantaneous Forward Voltage 7005-7020 7040 7060	$V_F$	0.95V 1.25V 1.35V	$I_{FM} = 35.0\text{A};$ $T_A = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	25 $\mu\text{A}$	$T_A = 25^\circ\text{C}$
Maximum Reverse Recovery Time 7005-7020 7040 7060	$T_{rr}$	50ns 60ns 75ns	$I_F=0.5\text{A}, I_R=1.0\text{A},$ $I_{rr}=0.25\text{A}$
Typical Junction Capacitance	$C_J$	240pF	Measured at 1.0MHz, $V_R=4.0\text{V}$

DIM	DIMENSIONS				NOTE
	INCH ES		MM		
	MIN	MAX	MIN	MAX	
A	1.180	1.195	29.97	30.35	
B	.220	NOM	5.08	NOM	2PL
C	.027	.037	0.69	0.94	
E	.350	.370	8.89	9.40	
F	1.490	1.510	37.85	38.35	
G	.695	.715	17.65	18.16	
H	.088	.098	2.24	2.49	
J	.240	.260	6.10	6.60	
K	.115	.135	2.92	3.43	
L	.460	.480	11.68	12.19	
M	.065	.085	1.65	2.16	
N	.151	.161	3.84	4.09	∅
P	.015	.025	0.38	0.64	

\*Pulse Test: Pulse Width 300 $\mu\text{sec}$ , Duty Cycle 1%

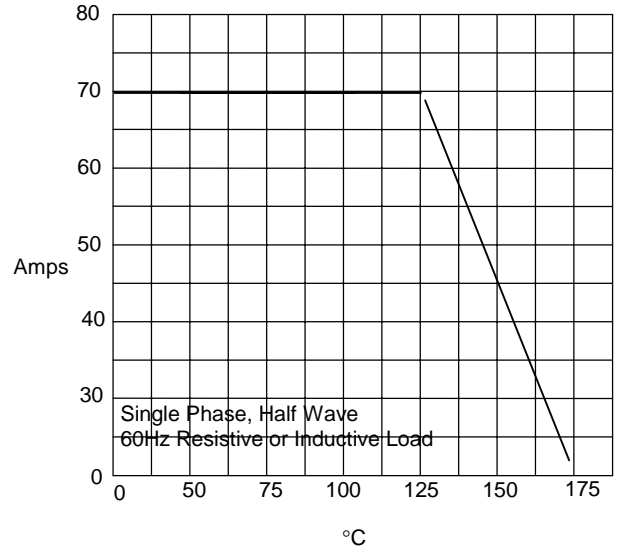


Figure 1  
Typical Forward Characteristics



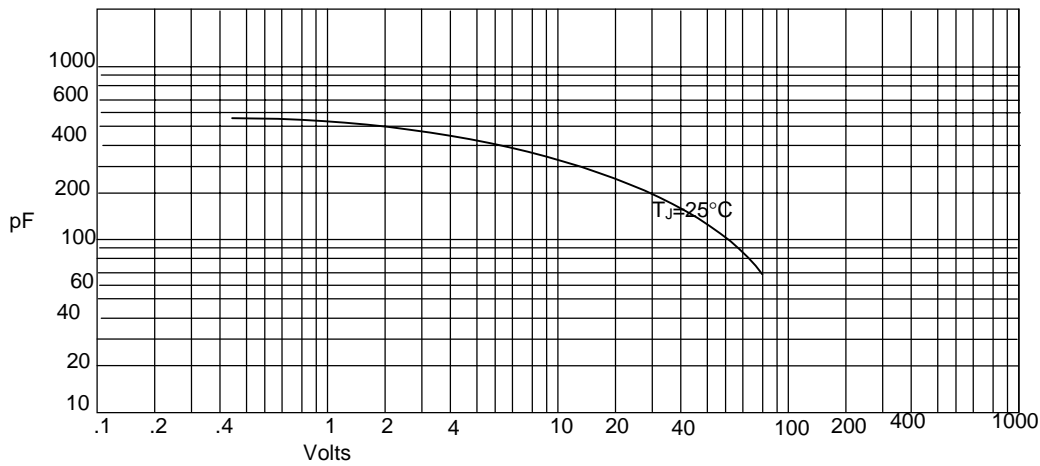
Instantaneous Forward Current - Amperes versus  
Instantaneous Forward Voltage - Volts

Figure 2  
Forward Derating Curve



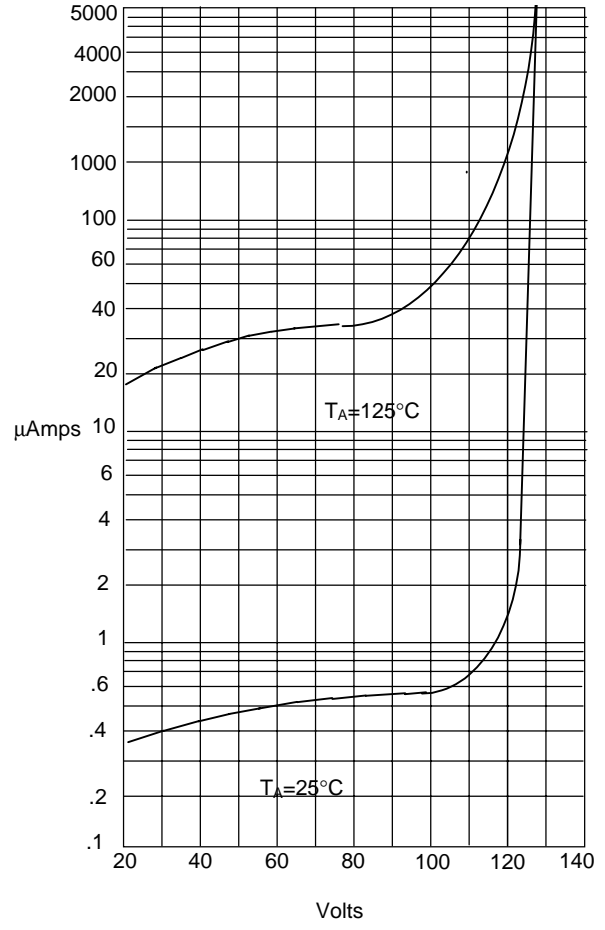
Average Forward Rectified Current - Amperes versus  
Ambient Temperature - °C

Figure 3  
Junction Capacitance

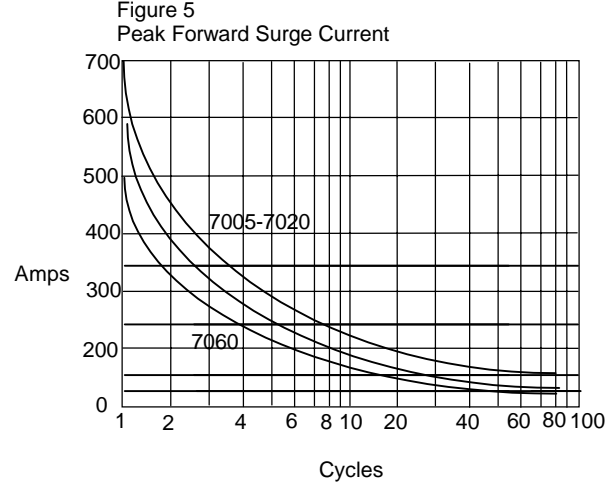


Junction Capacitance - pF versus  
Reverse Voltage - Volts

Figure 4  
Typical Reverse Characteristics



Instantaneous Reverse Leakage Current - MicroAmperes versus Percent Of Rated Peak Reverse Voltage - Volts



Peak Forward Surge Current - Amperes versus Number Of Cycles At 60Hz - Cycles