Micro Commercial Components
21201 Itasca Street Chatsworth
CA 91311
Phone: (818) 701-4933
Fax: (818) 701-4939

UFT7005SM THRU UFT7060SM

70 Amp Supre Fast Recovery Rectifier 50 to 600 Volts

Features

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

Maximum Ratings

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

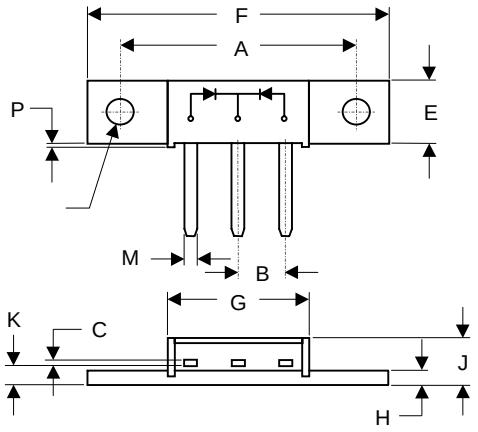
MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
UFT7005SM	50V	35V	50V
UFT7010SM	100V	70V	100V
UFT7020SM	200V	40V	200V
UFT7040SM	400V	280V	400V
UFT7060SM	600V	420V	600V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	70 A	T_L = 125°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} = 35.0A; T_A = 25°C
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	25µA	T_A = 25°C
Maximum Reverse Recovery Time 7005-7020 7040 7060	T_{rr}	50ns 60ns 75ns	I_F=0.5A, I_R=1.0A, I_{rr}=0.25A
Typical Junction Capacitance	C_J	240pF	Measured at 1.0MHz, V_R=4.0V

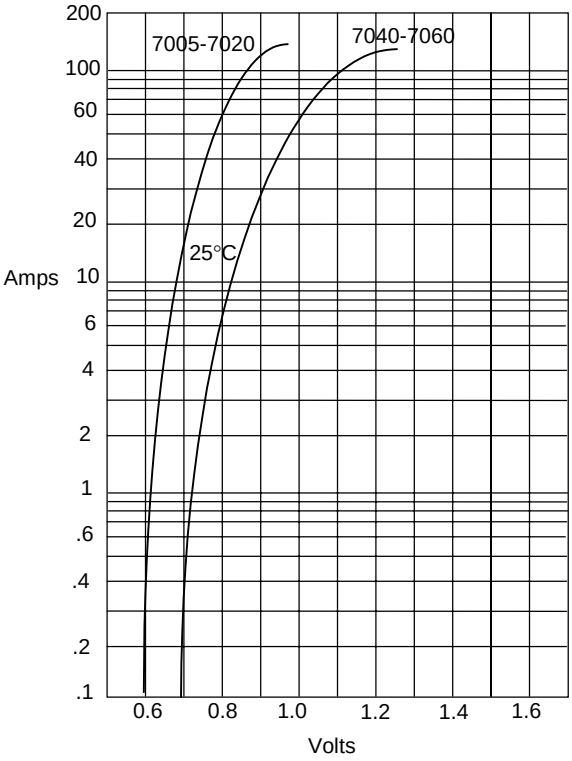
*Pulse Test: Pulse Width 300µsec, Duty Cycle 1%

MINIMOD-SM



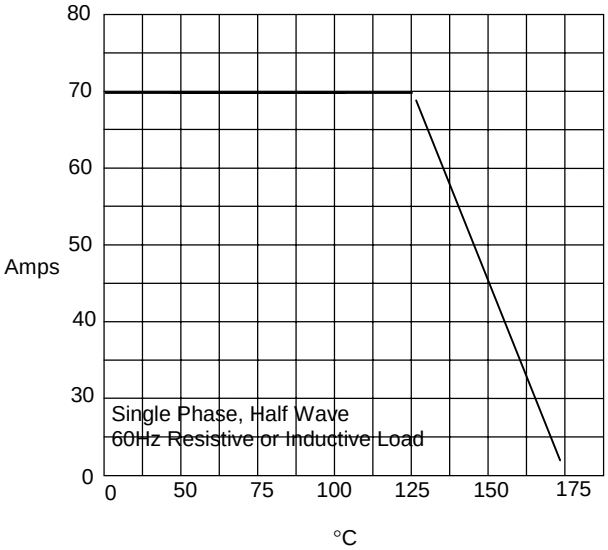
DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
A	1.180	1.195	29.97	30.35	
B	.220	NOM	5.08	NOM	2PL
C	.027	.037	0.69	0.94	
E	.350	.370	8.89	9.40	
F	1.490	1.510	37.85	38.35	
G	.695	.715	17.65	18.16	
H	.088	.098	2.24	2.49	
J	.240	.260	6.10	6.60	
K	.115	.135	2.92	3.43	
L	.230	.250	5.84	6.35	
M	.065	.085	1.65	2.16	
N	.151	.161	3.84	4.09	Ø
P	.015	.025	0.38	0.64	

Figure 1
Typical Forward Characteristics



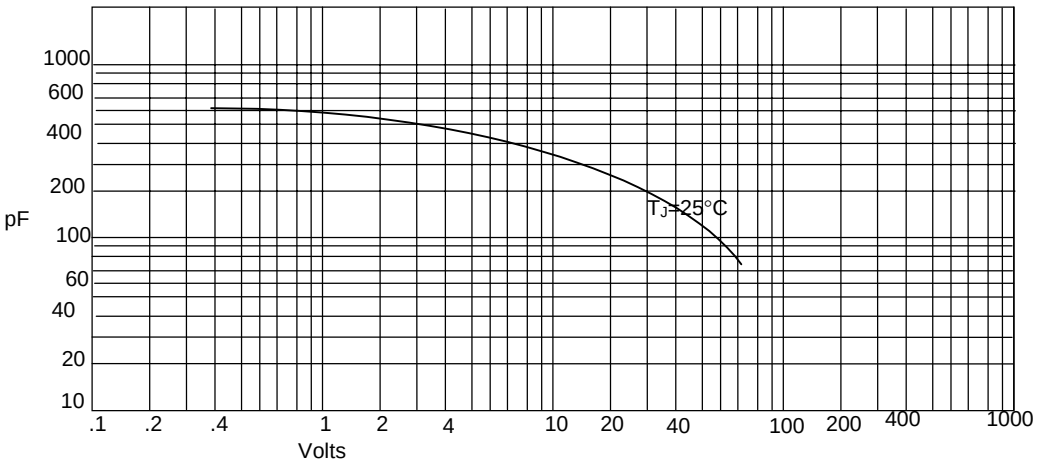
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



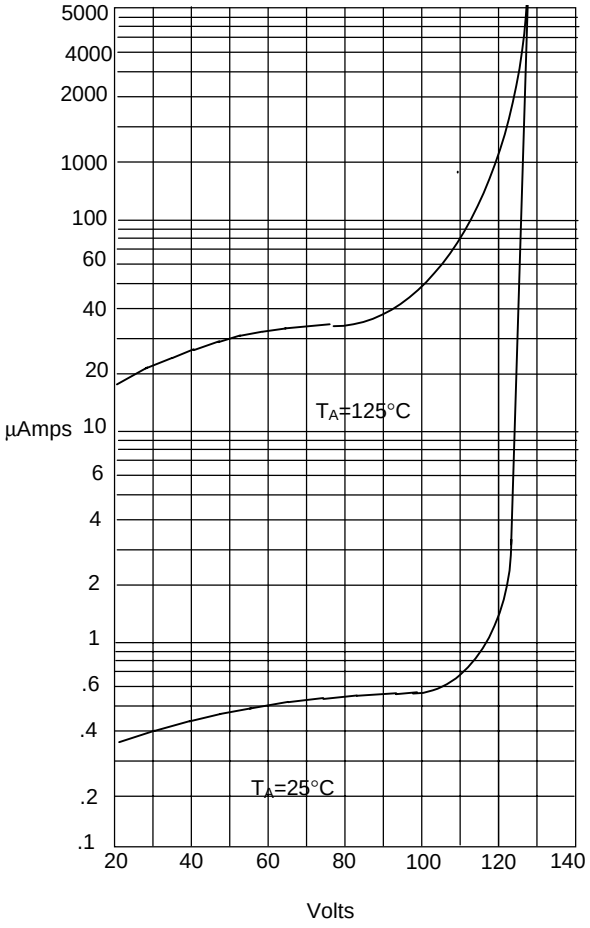
Average Forward Rectified Current - Amperes *versus*
Ambient Temperature - °C

Figure 3
Junction Capacitance



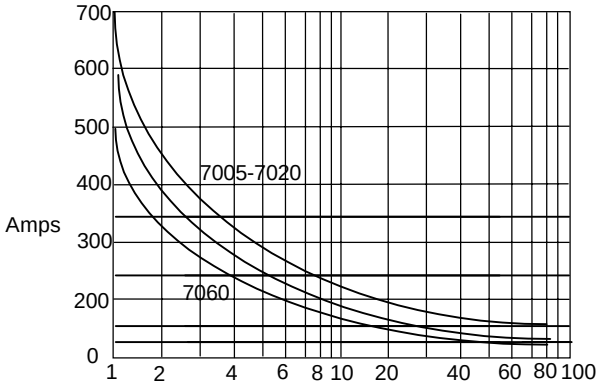
Junction Capacitance - pF *versus*
Reverse Voltage - Volts

Figure 4
Typical Reverse Characteristics



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

Figure 5
Peak Forward Surge Current



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