

MCC

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

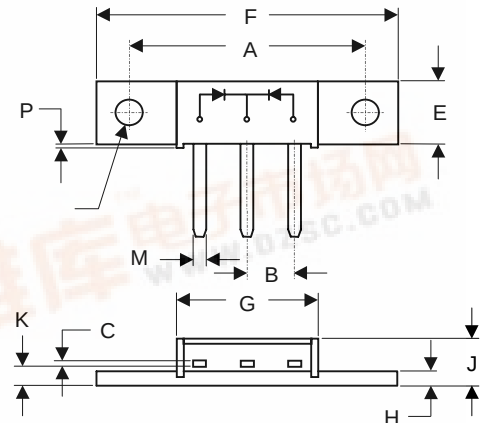
- Operating Temperature: -65°C to +175°C
- Storage Temperature: -65°C to +175°C

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

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 μA	$T_A = 25^\circ\text{C}$
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, $V_R=4.0\text{V}$

MINIMOD



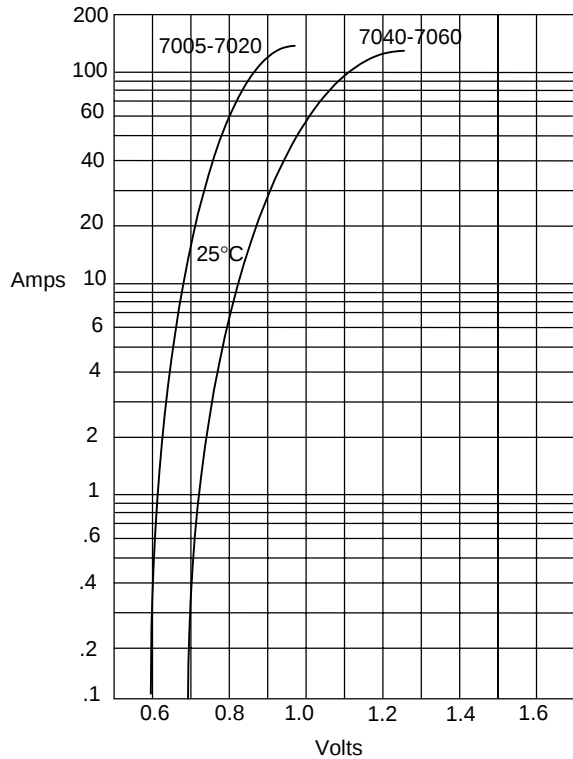
DIM	INCH		MM		NOTE
	MIN	MAX	MIN	MAX	
A	1.180	1.195	29.97	30.35	
B	.220	NOM	5.08	NOM	2PL
C	.027	.037	0.69	0.94	
E	.350	.370	8.89	9.40	
F	1.490	1.510	37.85	38.35	
G	.695	.715	17.65	18.16	
H	.088	.098	2.24	2.49	
J	.240	.260	6.10	6.60	
K	.115	.135	2.92	3.43	
L	.460	.480	11.68	12.19	
M	.065	.085	1.65	2.16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

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

UFT7005 thru UFT7060

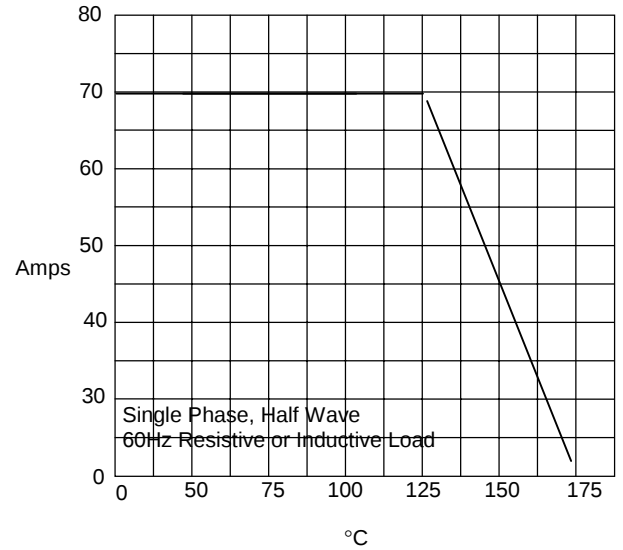


Figure 1
Typical Forward Characteristics



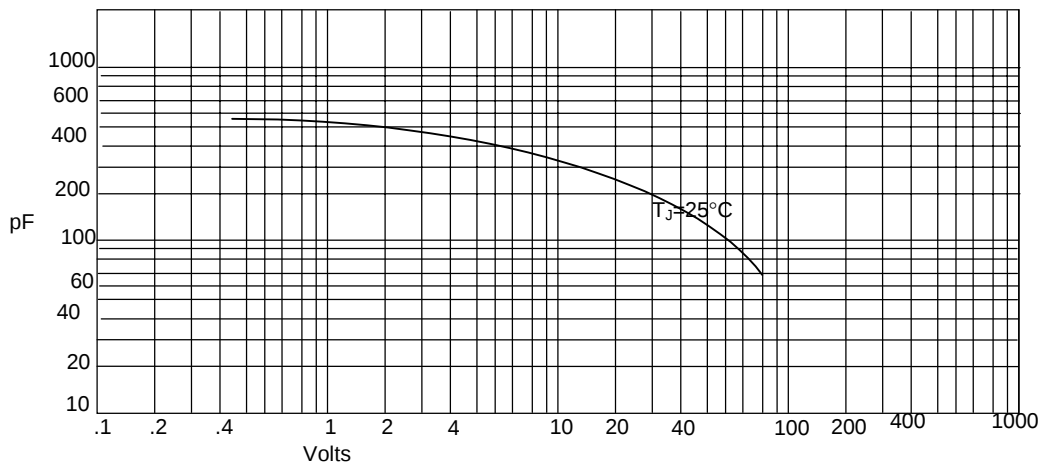
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

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

