

**M·C·C·**

Micro Commercial Components



Micro Commercial Components  
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## Features

- Ultra Fast Switching Speed For High Efficiency
- Low Leakage
- Halogen free available upon request by adding suffix "-HF"
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant (Note1) ("P"Suffix designates Compliant. See ordering information)

## Maximum Ratings

- Operating Temperature: -55°C to +125°C
- Storage Temperature: -55°C to +150°C
- Typical Thermal Resistance :60°C/W Junction to Ambient  
25°C/W Junction to Lead at 0.375"  
Lead Length P.C.B. Mounted

MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
UF4001	UF4001	50V	35V	50V
UF4002	UF4002	100V	70V	100V
UF4003	UF4003	200V	140V	200V
UF4004	UF4004	400V	280V	400V
UF4005	UF4005	600V	420V	400V
UF4006	UF4006	800V	560V	800V
UF4007	UF4007	1000V	700V	1000V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	1 A	$T_A = 55^\circ C$
Peak Forward Surge Current	$I_{FSM}$	30A	8.3ms, half sine
Maximum Instantaneous Forward Voltage UF4001-4003 UF4004 UF4005-4007	$V_F$	1.0 V 1.3 V 1.7 V	$I_{FM} = 1.0A$ ; $T_A = 25^\circ C$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5 $\mu$ A 100 $\mu$ A	$T_A = 25^\circ C$ $T_A = 100^\circ C$
Maximum Reverse Recovery Time UF4001-4004 UF4005-4007	$T_{rr}$	50ns 75ns	$I_F=0.5A$ , $I_R=1.0A$ , $I_{rr}=0.25A$
Typical Junction Capacitance UF4001-4004 UF4005-4007	$C_J$	20pF 10pF	Measured at 1.0MHz, $V_R=4.0V$

\*Pulse Test: Pulse Width 300 sec, Duty Cycle 1%

Note: 1. High Temperature Solder Exemption Applied, see EU Directive Annex 7.

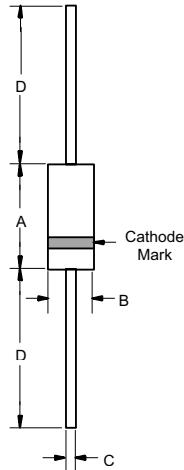
**UF4001**

**THRU**

**UF4007**

**1 Amp Ultra Fast Recovery Rectifier  
50 to 1000 Volts**

**DO-41**

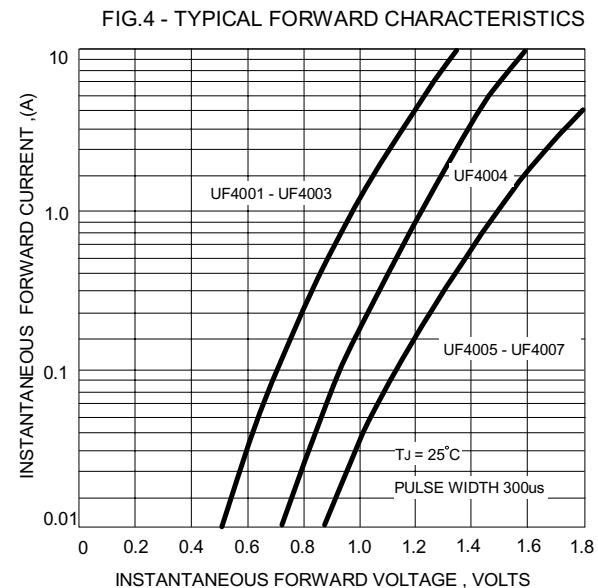
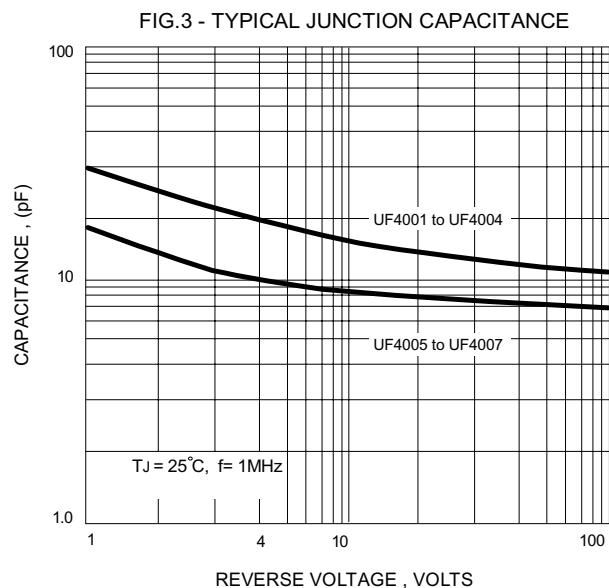
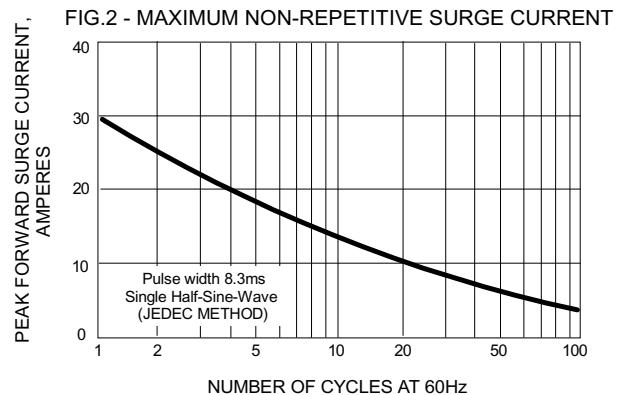
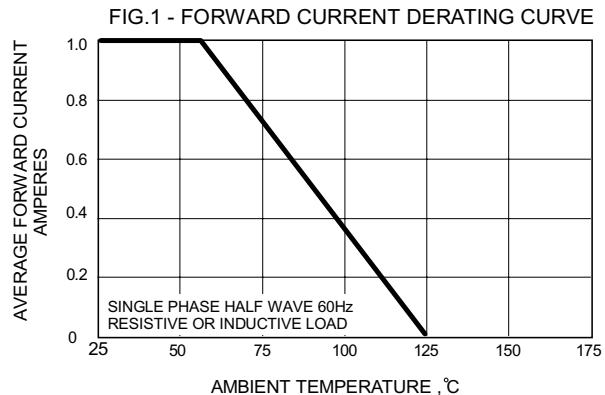


DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.166	.205	4.10	5.20	
B	.080	.107	2.00	2.70	
C	.028	.034	.70	.90	
D	1.000	---	25.40	---	

# UF4001 thru UF4007

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## Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 5Kpcs/Reel
Part Number-AP	Ammo Packing: 5Kpcs/Ammo Box
Part Number-BP	Bulk: 50Kpcs/Carton

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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