

# Micro Commercial Components Corp.

Complete Discrete Semiconductor Solutions

Part Number	UF4007	
product family	ULTRA FAST RECOVERY RECTIFIERS	
package type	DO-41	
VRM(PRV)	1000V	
Ifsm	30A	
IF(AV)	1.0A	
@Vf	1.7V	
@If	1.0A	
Trr	75nS	
IR	5.0µA	
@VR	1000V	
Package Qty	Bulk: 1K/Box, 50K/Ctn; Tape: 5K/Reel, 20K/Ctn; T/B: 5K Ammo Box, 50K/Ctn.	

This product is listed under the following categories where you may find similar products: Diodes

Ultra Fast Recovery Rectifiers



# UF4001 THRU UF4007

## Features

- Ultra Fast Switching Speed For High Efficiency
- Low Leakage
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL rating 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 25°C/W

MCC	Device	Maximum	Maximum	Maximum
Catalog	Marking	Recurrent	RMS	DC
Number		Peak Reverse	Voltage	Blocking
		Voltage	_	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

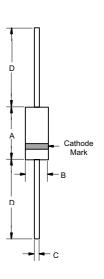
100410410410140			and the opening
Average Forward Current	I <sub>F(AV)</sub>	1 A	T <sub>A</sub> = 55°C
Peak Forward Surge Current	I <sub>FSM</sub>	30A	8.3ms, half sine
Maximum Instantaneous Forward Voltage			
UF4001-4003 UF4004 UF4005-4007	$V_{F}$	1.0 V 1.3 V 1.7 V	I <sub>FM</sub> = 1.0A; T <sub>A</sub> = 25°C
Maximum DC			
Reverse Current At	$I_R$	5 μΑ	T <sub>A</sub> = 25°C
Rated DC Blocking		100μΑ	T <sub>A</sub> = 100°C
Voltage			
Maximum Reverse			
Recovery Time			
UF4001-4004	T <sub>rr</sub>	50ns	$I_F$ =0.5A, $I_R$ =1.0A,
UF4005-4007		75ns	I <sub>rr</sub> =0.25A
Typical Junction			
Capacitance			
UF4001-4004	$\mathbf{C}_{J}$	20pF	Measured at
UF4005-4007		10pF	1.0MHz, V <sub>R</sub> =4.0V

<sup>\*</sup>Pulse Test: Pulse Width 300 sec, Duty Cycle 1%

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

# 1 Amp Ultra Fast Recovery Rectifier 50 to 1000 Volts





DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
Α	.166	.205	4.10	5.20	
В	.080	.107	2.00	2.70	
С	.028	.034	.70	.90	
D	1.000		25.40		



### **Ordering Information**

Device	Packing
(Part Number)-TP	Tape&Reel 5Kpcs/Reel
(Part Number)-AP	Ammo Packing;5Kpcs/AmmoBox
(Part Number)-BP	Bulk;1Kpcs/Box

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