

# Micro Commercial Components Corp.

**Complete Discrete Semiconductor Solutions** 

Part Number	UF4004	
product family	ULTRA FAST RECOVERY RECTIFIERS	
backage type	DO-41	
VRM(PRV)	400V	
lfsm	30A	
IF(AV)	1.0A	
@Vf	1.3V	
@lf	1.0A	
Trr	50nS	
IR	5.0μΑ	
@VR	400V	
Package Qty	Bulk: 1K/Box, 50K/Ctn ; Tape : 5K/Reel, 20K/Ctn; T/B: 5K/ Ammo Box, 50K/Ctn.	
his product is listed und Diodes Iltra Fast Recovery Recti	er the following categories where you may find similar products:	



**Micro Commercial Components** 

### 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

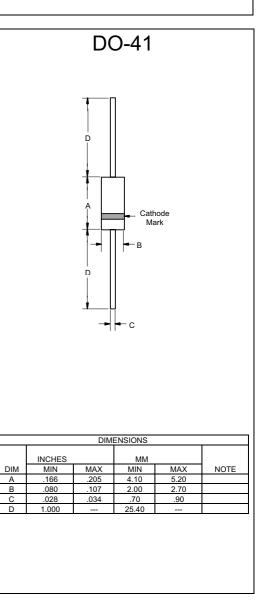
MCC	Device	Maximum	Maximum	Maximum
Catalog	Marking	Recurrent RMS		DC
Number	Ū	Peak Reverse	Voltage	Blocking
		Voltage	-	Voltage
UF4001	UF4001	50V	35V	50V
UF4002	UF4002	100V	70V	100V
UF4003	UF4003	200V	140V	200V
UF4004	UF4004	400V	280V	400V
UF4005	UF4005	600V	420V	400V
UF4006	UF4006	800V	560V	800V
UF4007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

### Electrical Characteristics @ 25 $^\circ\text{C}$ Unless Otherwise Specified

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 1.3V 1.7V	I <sub>FM</sub> = 1.0A; T <sub>A</sub> = 25°C
Maximum DC			
Reverse Current At	I <sub>R</sub>	5 μΑ	T <sub>A</sub> = 25°C
Rated DC Blocking		100µA	T <sub>A</sub> = 100°C
Voltage		•	
Maximum Reverse			
Recovery Time		50	
0F4001-4004	T <sub>rr</sub>	50ns	I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A,
UF4005-4007		75ns	I <sub>rr</sub> =0.25A
Typical Junction			
Capacitance			
UF4001-4004	CJ	20pF	Measured at
UF4005-4007		10pF	1.0MHz, V <sub>R</sub> =4.0V

# UF4001 THRU UF4007

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



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

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



### **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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