

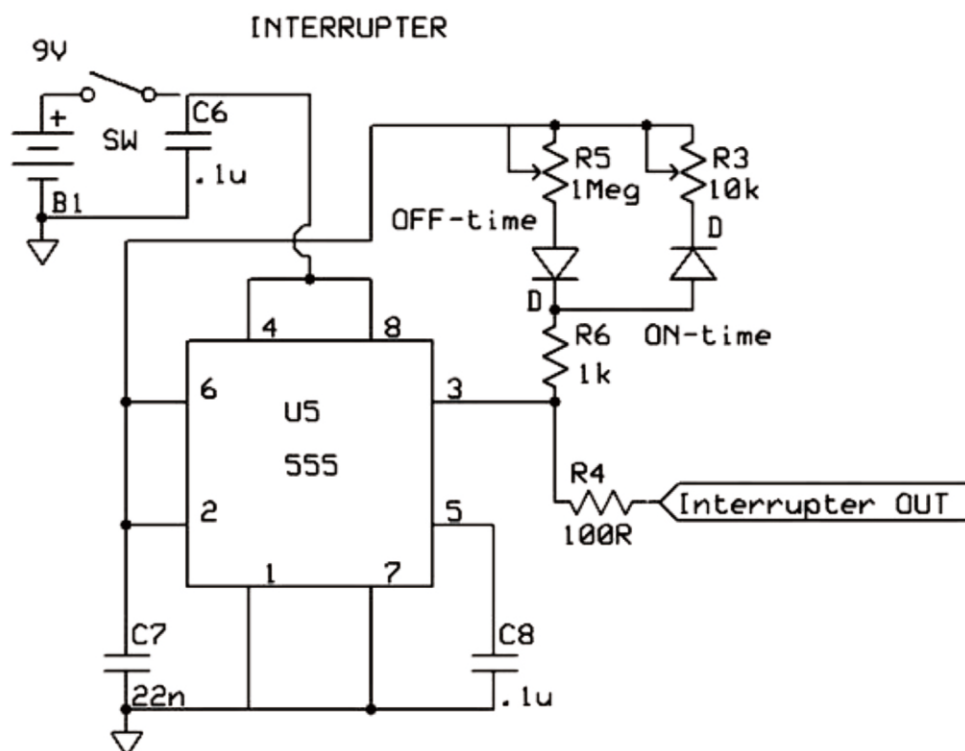
Ultra Fast Recovery Rectifiers Diodes 特快恢复整流二极管

1.Description:	介绍：
Ultra fast recovery diode(UFRD) is a semiconductor diode with excellent switching, short reverse recovery time. It is widely used in the circuit of switching power supply, PWM, converter as high frequency rectifiers, freewheeling diode or damper diode.	特快恢复二极管（简称UFRD）是一种具有开关特性好、反向恢复时间短特点的半导体二极管，主要应用于开关电源、PWM脉宽调制器、变频器等电子电路中，作为高频整流二极管、续流二极管或阻尼二极管使用。

2.Features:	特点：	Symbol符号:
1) Fast recovery, high efficiency	1) 快速恢复时间的高效率；	
2) Low forward voltage	2) 低正向压降；	
3) High current	3) 大电流能力；	

3.Application:	应用：
For rectified current in electronics products.	电子产品整流电流

4.Schematic / 应用电路图



Type	VRRM	Io	IfSM	IR	Vf	If	Trr	Package
	(V)	(A)	(A)	(μ A)	(V)	(A)	(ns)	

If:1 Ampere / Trr:50-75ns / SMA

US1A	50	1	30	5	1	1	50	SMA
US1B	100	1	30	5	1	1	50	
US1D	200	1	30	5	1	1	50	
US1G	400	1	30	5	1.3	1	50	
US1J	600	1	30	5	1.7	1	75	
US1K	800	1	30	5	1.7	1	75	
US1M	1000	1	30	5	1.7	1	75	
UF1A	50	1	30	5	1	1	50	
UF1B	100	1	30	5	1	1	50	
UF1D	200	1	30	5	1	1	50	
UF1G	400	1	30	5	1.3	1	50	
UF1J	600	1	30	5	1.7	1	75	
UF1K	800	1	30	5	1.7	1	75	
UF1M	1000	1	30	5	1.7	1	75	


If:2 Ampere / Trr:50-75ns / SMB

UF2A	50	2	50	5	1	2	50	SMB
UF2B	100	2	50	5	1	2	50	
UF2D	200	2	50	5	1	2	50	
UF2G	400	2	50	5	1.3	2	50	
UF2J	600	2	50	5	1.7	2	75	
UF2K	800	2	50	5	1.7	2	75	
UF2M	1000	2	50	5	1.7	2	75	


If:2 Ampere / Trr:50-75ns / SMC

UF3A	50	2	100	5	1	2	50	SMC
UF3B	100	2	100	5	1	2	50	
UF3D	200	2	100	5	1	2	50	
UF3G	400	2	100	5	1.3	2	50	
UF3J	600	2	100	5	1.7	2	75	
UF3K	800	2	100	5	1.7	2	75	
UF3M	1000	2	100	5	1.7	2	75	


If:1 Ampere / Trr:50-75ns / SMAF

US1AF	50	1	30	5	1	1	50	SMAF
US1BF	100	1	30	5	1	1	50	
US1DF	200	1	30	5	1	1	50	
US1GF	400	1	30	5	1.3	1	50	
US1JF	600	1	30	5	1.65	1	75	
US1KF	800	1	30	5	1.65	1	75	
US1MF	1000	1	30	5	1.65	1	75	



Type	VRRM	Io	IFSM	IR	Vf	If	Trr	Package
	(V)	(A)	(A)	(μ A)	(V)	(A)	(ns)	

If:2 Ampere / Trr:50-75ns / SMAF

US2AF	50	2	50	5	1	2	50	SMAF
US2BF	100	2	50	5	1	2	50	
US2DF	200	2	50	5	1	2	50	
US2GF	400	2	50	5	1.3	2	50	
US2JF	600	2	50	5	1.65	2	75	
US2KF	800	2	50	5	1.65	2	75	
US2MF	1000	2	50	5	1.65	2	75	



SMAF

If:3 Ampere / Trr:50-75ns / SMAF

US3AF	50	3	100	5	1	3	50	SMAF
US3BF	100	3	100	5	1	3	50	
US3DF	200	3	100	5	1	3	50	
US3GF	400	3	100	5	1.3	3	50	
US3JF	600	3	100	5	1.65	3	75	
US3KF	800	3	100	5	1.65	3	75	
US3MF	1000	3	100	5	1.65	3	75	



SMAF

If:1 Ampere / Trr:50-75ns / SMBF

US1ABF	50	1	35	5	1	1	50	SMBF
US1BBF	100	1	35	5	1	1	50	
US1DBF	200	1	35	5	1	1	50	
US1GBF	400	1	35	5	1.3	1	50	
US1JBF	600	1	35	5	1.5	1	75	
US1KBF	800	1	35	5	1.5	1	75	
US1MBF	1000	1	35	5	1.5	1	75	



SMBF

If:2 Ampere / Trr:50-75ns / SMBF

US2ABF	50	2	55	5	1	2	50	SMBF
US2BBF	100	2	55	5	1	2	50	
US2DBF	200	2	55	5	1	2	50	
US2GBF	400	2	55	5	1.3	2	50	
US2JBF	600	2	50	5	1.6	2	75	
US2KBF	800	2	50	5	1.6	2	75	
US2MBF	1000	2	50	5	1.6	2	75	



SMBF

If:3 Ampere / Trr:50-75ns / SMBF

US3ABF	50	3	100	5	1	3	50	SMBF
US3BBF	100	3	100	5	1	3	50	
US3DBF	200	3	100	5	1	3	50	
US3GBF	400	3	100	5	1.3	3	50	
US3JBF	600	3	100	5	1.6	3	75	
US3KBF	800	3	100	5	1.6	3	75	
US3MBF	1000	3	100	5	1.6	3	75	



SMBF

Type	VRRM	I _o	I _{FSM}	I _R	V _F	I _F	T _{rr}	Package
	(V)	(A)	(A)	(μ A)	(V)	(A)	(ns)	

I_F: 1 Ampere / T_{rr}: 50-75ns / SOD-123FL

US1AL	50	1	30	5	1	1	50	SOD-123FL
US1BL	100	1	30	5	1	1	50	
US1DL	200	1	30	5	1	1	50	
US1GL	400	1	30	5	1.3	1	50	
US1JL	600	1	30	5	1.65	1	75	
US1KL	800	1	30	5	1.65	1	75	
US1ML	1000	1	30	5	1.65	1	75	



SOD-123FL

I_F: 2 Ampere / T_{rr}: 50-75ns / SOD-123FL

US2AW	50	2	50	5	1	2	50	SOD-123FL
US2BL	100	2	50	5	1	2	50	
US2DL	200	2	50	5	1	2	50	
US2GL	400	2	50	5	1.4	2	50	
US2JL	600	2	50	5	1.68	2	75	
US2KL	800	2	50	5	1.68	2	75	
US2ML	1000	2	50	5	1.68	2	75	



SOD-123FL

I_F: 3 Ampere / T_{rr}: 50-75ns / SOD-123FL

US3AL	50	2	100	5	1	3	50	SOD-123FL
US3BL	100	2	100	5	1	3	50	
US3DL	200	2	100	5	1	3	50	
US3GL	400	2	100	5	1.3	3	50	
US3JL	600	2	100	5	1.7	3	75	
US3KL	800	2	100	5	1.7	3	75	
US3ML	1000	2	100	5	1.7	3	75	



SOD-123FL

***Notes:**

V_{RRM} = Repetitive Peak Reverse Voltage / 重复反向峰值电压

I_o = Maximum Average Rectified Current / 最大平均正向电流

I_{FSM} = Maximum Forward Peak Surge Current / 最大正向浪涌电流

I_R = Maximum Reverse Current / 最大反向电流

V_F = Maximum Forward Voltage / 最大正向电压

I_F = Maximum Forward Current / 最大正向电流

T_{rr} = Reverse Recovery Time / 反向恢复时间