

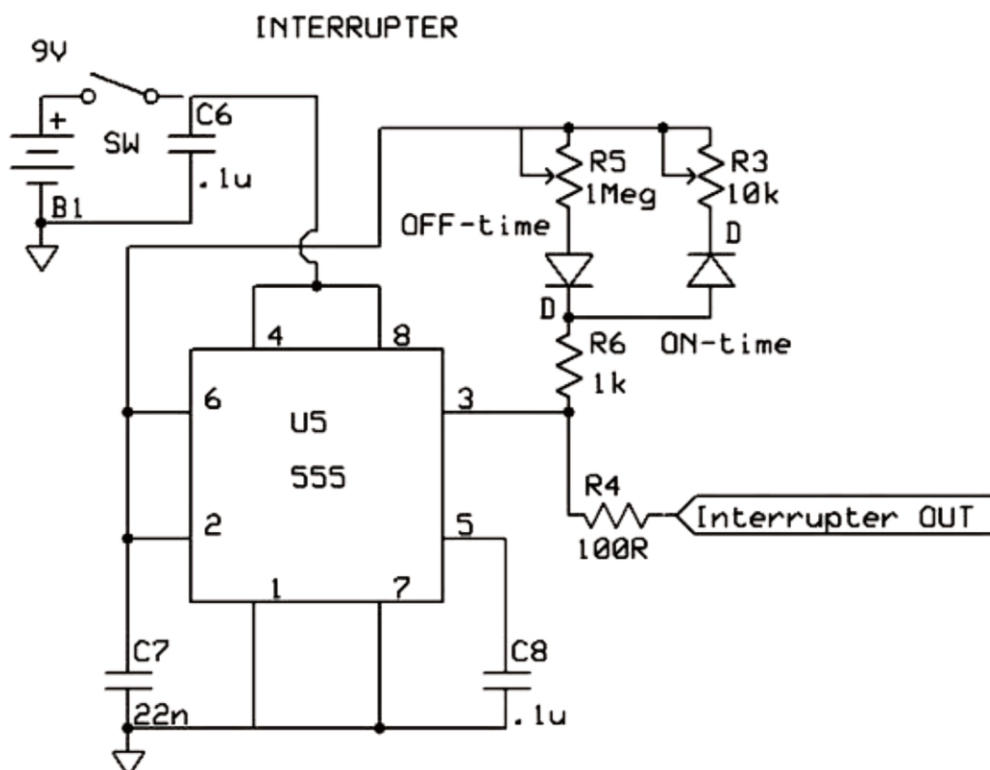
Fast Recovery Rectifiers Diodes 快恢复整流二极管

1.Description:	介绍：
Fast Recovery Rectifier Diode is also high frequency rectifier diode. The general rectifier diode has low working frequency (e.g., line frequency is 50Hz), but fast recovery diode high work frequency which reaches 3KHz. Trr for fast recovery diode is some hundred seconds and for super fast recovery diode is few seconds. The smaller the Trr value, the higher the work frequency.	快速恢复整流二极管属于整流二极管中的高频整流二极管，之所以称其为快速恢复二极管，这是因为普通整流二极管一般工作于低频(如市电频率为50Hz)，其工作频率低于3kHz。快速恢复整流二极管的trr为几百纳秒，超快速恢复二极管的trr一般为几十纳秒。Trr越小的快速恢复二极管的工作频率越高。

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:150-500ns / SMA

RS1A	50	1	30	5	1.3	1	150	SMA
RS1B	100	1	30	5	1.3	1	150	
RS1D	200	1	30	5	1.3	1	150	
RS1G	400	1	30	5	1.3	1	150	
RS1J	600	1	30	5	1.3	1	250	
RS1K	800	1	30	5	1.3	1	500	
RS1M	1000	1	30	5	1.3	1	500	
FR1A	50	1	30	5	1.3	1	150	
FR1B	100	1	30	5	1.3	1	150	
FR1D	200	1	30	5	1.3	1	150	
FR1G	400	1	30	5	1.3	1	150	
FR1J	600	1	30	5	1.3	1	250	
FR1K	800	1	30	5	1.3	1	500	
FR1M	1000	1	30	5	1.3	1	500	


SMA
IF:2 Ampere / Trr:150-500ns / SMB

FR2A	50	2	50	5	1.3	2	150	SMB
FR2B	100	2	50	5	1.3	2	150	
FR2D	200	2	50	5	1.3	2	150	
FR2G	400	2	50	5	1.3	2	150	
FR2J	600	2	50	5	1.3	2	250	
FR2K	800	2	50	5	1.3	2	500	
FR2M	1000	2	50	5	1.3	2	500	


SMB
IF:2 Ampere / Trr:150-500ns / SMC

FR3A	50	3	100	5	1.3	2	150	SMC
FR3B	100	3	100	5	1.3	2	150	
FR3D	200	3	100	5	1.3	2	150	
FR3G	400	3	100	5	1.3	2	150	
FR3J	600	3	100	5	1.3	2	250	
FR3K	800	3	100	5	1.3	2	500	
FR3M	1000	3	100	5	1.3	2	500	


SMC
IF:1 Ampere / Trr:150-500ns / SMAF

RS1AF	50	1	30	5	1.3	1	150	SMAF
RS1BF	100	1	30	5	1.3	1	150	
RS1DF	200	1	30	5	1.3	1	150	
RS1GF	400	1	30	5	1.3	1	150	
RS1JF	600	1	30	5	1.3	1	250	
RS1KF	800	1	30	5	1.3	1	500	
RS1MF	1000	1	30	5	1.3	1	500	


SMAF

Type	VRRM	Io	IFSM	IR	VF	IF	Trr	Package
	(V)	(A)	(A)	(μA)	(V)	(A)	(ns)	

IF:2 Ampere / Trr:150-500ns / SMAF

RS2AF	50	2	50	5	1.3	2	150	SMAF
RS2BF	100	2	50	5	1.3	2	150	
RS2DF	200	2	50	5	1.3	2	150	
RS2GF	400	2	50	5	1.3	2	150	
RS2JF	600	2	50	5	1.3	2	250	
RS2KF	800	2	50	5	1.3	2	500	
RS2MF	1000	2	50	5	1.3	2	500	


SMAF
IF:3 Ampere / Trr:150-250ns / SMAF

RS3AF	50	3	100	5	1.3	3	150	SMAF
RS3BF	100	3	100	5	1.3	3	150	
RS3DF	200	3	100	5	1.3	3	150	
RS3GF	400	3	100	5	1.3	3	150	
RS3JF	600	3	100	5	1.3	3	250	
RS3KF	800	3	100	5	1.3	3	250	
RS3MF	1000	3	100	5	1.3	3	250	


SMAF
IF:1 Ampere / Trr:150-500ns / SMBF

RS1ABF	50	1	30	5	1.3	1	150	SMBF
RS1BBF	100	1	30	5	1.3	1	150	
RS1DBF	200	1	30	5	1.3	1	150	
RS1GBF	400	1	30	5	1.3	1	150	
RS1JBF	600	1	30	5	1.3	1	250	
RS1KBF	800	1	30	5	1.3	1	500	
RS1MBF	1000	1	30	5	1.3	1	500	


SMBF
IF:2 Ampere / Trr:150-500ns / SMBF

RS2ABF	50	2	50	5	1.3	2	150	SMBF
RS2BBF	100	2	50	5	1.3	2	150	
RS2DBF	200	2	50	5	1.3	2	150	
RS2GBF	400	2	50	5	1.3	2	150	
RS2JBF	600	2	50	5	1.3	2	250	
RS2KBF	800	2	50	5	1.3	2	500	
RS2MBF	1000	2	50	5	1.3	2	500	


SMBF
IF:3 Ampere / Trr:150-250ns / SMBF

RS3ABF	50	3	100	5	1.3	3	150	SMBF
RS3BBF	100	3	100	5	1.3	3	150	
RS3DBF	200	3	100	5	1.3	3	150	
RS3GBF	400	3	100	5	1.3	3	150	
RS3JBF	600	3	100	5	1.3	3	250	
RS3KBF	800	3	100	5	1.3	3	250	
RS3MBF	1000	3	100	5	1.3	3	250	


SMBF

Type	V _{RRM}	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}:150-500ns / SOD-123FL

RS1AL	50	1	25	5	1.3	1	150	SOD-123FL
RS1BL	100	1	25	5	1.3	1	150	
RS1DL	200	1	25	5	1.3	1	150	
RS1GL	400	1	25	5	1.3	1	150	
RS1JL	600	1	25	5	1.3	1	250	
RS1KL	800	1	25	5	1.3	1	500	
RS1ML	1000	1	25	5	1.3	1	500	


I_F:1.5 Ampere / T_{rr}:150-500ns / SOD-123FL

RS15AL	50	1.5	45	5	1.3	1.5	150	SOD-123FL
RS15BL	100	1.5	45	5	1.3	1.5	150	
RS15DL	200	1.5	45	5	1.3	1.5	150	
RS15GL	400	1.5	45	5	1.3	1.5	150	
RS15JL	600	1.5	45	5	1.3	1.5	250	
RS15KL	800	1.5	45	5	1.3	1.5	500	
RS15ML	1000	1.5	45	5	1.3	1.5	500	


I_F:2 Ampere / T_{rr}:150-500ns / SOD-123FL

RS2AL	50	2	50	5	1.3	2	150	SOD-123FL
RS2BL	100	2	50	5	1.3	2	150	
RS2DL	200	2	50	5	1.3	2	150	
RS2GL	400	2	50	5	1.3	2	150	
RS2JL	600	2	50	5	1.3	2	250	
RS2KL	800	2	50	5	1.3	2	500	
RS2ML	1000	2	50	5	1.3	2	500	


***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