



FAST RECOVERY RECTIFIERS

SENSITRON SEMICONDUCTOR

OPERATING AND STORAGE TEMPERATURE -65°C TO +150°C

TYPE	Maximum Peak Reverse Voltage	Maximum Average Rectified Current @Half-Wave Resistive Load 60Hz		Maximum Forward Peak Surge Current @8.3ms Superimposed	Maximum Reverse Current @PRV @25°C T _A	Maximum Forward Voltage @25°C T _A		Maximum Reverse Recovery Time
	PRV	I _o @ T _A		I _{FM} (Surge)	I _R	I _{FM}	V _{FM}	T _{rr}
	V _{PK}	A _{AV}	°C	A _{PK}	μA _{dc}	V _{PK}	V _{PK}	ns

1.0 AMPERE-FAST RECOVERY / R-1

1F1	50	1.0	25	25	5.0	1.0	1.3	150
1F2	100	1.0	25	25	5.0	1.0	1.3	150
1F3	200	1.0	25	25	5.0	1.0	1.3	150
1F4	400	1.0	25	25	5.0	1.0	1.3	150
1F5	600	1.0	25	25	5.0	1.0	1.3	250
1F6	800	1.0	25	25	5.0	1.0	1.3	500
1F7	1000	1.0	25	25	5.0	1.0	1.3	500

1.0 AMPERE-FAST RECOVERY / A-405

RL101F	50	1.0	55	30	5.0	1.0	1.3	150
RL102F	100	1.0	55	30	5.0	1.0	1.3	150
RL103F	200	1.0	55	30	5.0	1.0	1.3	150
RL104F	400	1.0	55	30	5.0	1.0	1.3	150
RL105F	600	1.0	55	30	5.0	1.0	1.3	250
RL106F	800	1.0	55	30	5.0	1.0	1.3	500
RL107F	1000	1.0	55	30	5.0	1.0	1.3	500

1.0 AMPERE-FAST RECOVERY / DO-41

FR101	50	1.0	75	30	5.0	1.0	1.3	150
FR102	100	1.0	75	30	5.0	1.0	1.3	150
FR103	200	1.0	75	30	5.0	1.0	1.3	150
FR104	400	1.0	75	30	5.0	1.0	1.3	150
FR105	600	1.0	75	30	5.0	1.0	1.3	250
FR106	800	1.0	75	30	5.0	1.0	1.3	500
FR107	1000	1.0	75	30	5.0	1.0	1.3	500
BA157	400	1.0	75	30	5.0	1.0	1.3	150
BA158	600	1.0	75	30	5.0	1.0	1.3	250
BA159	1000	1.0	75	30	5.0	1.0	1.3	500
1N4933	50	1.0	75	30	5.0	1.0	1.3	200
1N4934	100	1.0	75	30	5.0	1.0	1.3	200
1N4935	200	1.0	75	30	5.0	1.0	1.3	200
1N4936	400	1.0	75	30	5.0	1.0	1.3	200
1N4937	600	1.0	75	30	5.0	1.0	1.3	200
1N4942	200	1.0	75	30	5.0	1.0	1.3	150
1N4944	400	1.0	75	30	5.0	1.0	1.3	150
1N4946	600	1.0	75	30	5.0	1.0	1.3	250
1N4947	800	1.0	75	30	5.0	1.0	1.3	250
1N4948	1000	1.0	75	30	5.0	1.0	1.3	500

1.0 AMPERE-FAST RECOVERY / SMB



FR1A	50	1.0	90	30	5.0	1.0	1.3	150
FR1B	100	1.0	90	30	5.0	1.0	1.3	150
FR1D	200	1.0	90	30	5.0	1.0	1.3	150
FR1G	400	1.0	90	30	5.0	1.0	1.3	150
FR1J	600	1.0	90	30	5.0	1.0	1.3	250
FR1K	800	1.0	90	30	5.0	1.0	1.3	500

NOTE: T_{rr} Conditions: I_F=0.5A, I_R=1.0A, Recovery to 0.25A.



FAST RECOVERY RECTIFIERS

SENSITRON SEMICONDUCTOR

OPERATING AND STORAGE TEMPERATURE -65°C TO +150°C

TYPE	Maximum Peak Reverse Voltage	Maximum Average Rectified Current @Half-Wave Resistive Load 60Hz		Maximum Forward Peak Surge Current @8.3ms Superimposed	Maximum Reverse Current @PRV @25°C T _A	Maximum Forward Voltage @25°C T _A		Maximum Reverse Recovery Time
	PRV	I _o @ T _A		I _{FM} (Surge)	I _R	I _{FM}	V _{FM}	T _{rr}
	V _{PK}	A _{AV}	°C	A _{PK}	μA _{dc}	V _{PK}	V _{PK}	ns

1.0 AMPERE-FAST RECOVERY / SMA



RS1A	50	1.0	90	30	5.0	1.0	1.3	150
RS1B	100	1.0	90	30	5.0	1.0	1.3	150
RS1D	200	1.0	90	30	5.0	1.0	1.3	150
RS1G	400	1.0	90	30	5.0	1.0	1.3	150
RS1J	600	1.0	90	30	5.0	1.0	1.3	250
RS1K	800	1.0	90	30	5.0	1.0	1.3	500

1.0 AMPERE-FAST RECOVERY / SMA (DO-214C)



RS1A	50	1.0	55	30	5.0	1.0	1.3	150
RS1B	100	1.0	55	30	5.0	1.0	1.3	150
RS1D	200	1.0	55	30	5.0	1.0	1.3	150
RS1G	400	1.0	55	30	5.0	1.0	1.3	150
RS1J	600	1.0	55	30	5.0	1.0	1.3	250
RS1K	800	1.0	55	30	5.0	1.0	1.3	500
RS1M	1000	1.0	55	30	5.0	1.0	1.3	500

1.0 AMPERE-FAST RECOVERY / SMB (DO-214AA)



FR1A	50	1.0	55	30	5.0	1.0	1.3	150
FR1B	100	1.0	55	30	5.0	1.0	1.3	150
FR1D	200	1.0	55	30	5.0	1.0	1.3	150
FR1G	400	1.0	55	30	5.0	1.0	1.3	150
FR1J	600	1.0	55	30	5.0	1.0	1.3	250
FR1K	800	1.0	55	30	5.0	1.0	1.3	500
FR1M	1000	1.0	55	30	5.0	1.0	1.3	500

1.5 AMPERE-FAST RECOVERY / DO-15



FR151	50	1.5	75	60	5.0	1.5	1.3	150
FR152	100	1.5	75	60	5.0	1.5	1.3	150
FR153	200	1.5	75	60	5.0	1.5	1.3	150
FR154	400	1.5	75	60	5.0	1.5	1.3	150
FR155	600	1.5	75	60	5.0	1.5	1.3	250
FR156	800	1.5	75	60	5.0	1.5	1.3	500
FR157	1000	1.5	75	60	5.0	1.5	1.3	500

2.0 AMPERE-FAST RECOVERY / DO-15



FR201	50	2.0	75	70	5.0	2.0	1.3	150
FR202	100	2.0	75	70	5.0	2.0	1.3	150
FR203	200	2.0	75	70	5.0	2.0	1.3	150
FR204	400	2.0	75	70	5.0	2.0	1.3	150
FR205	600	2.0	75	70	5.0	2.0	1.3	250
FR206	800	2.0	75	70	5.0	2.0	1.3	500
FR207	1000	2.0	75	70	5.0	2.0	1.3	500
BY296	100	2.0	75	70	5.0	2.0	1.3	150
BY297	200	2.0	75	70	5.0	2.0	1.3	150
BY298	400	2.0	75	70	5.0	2.0	1.3	150
BY299	800	2.0	75	70	5.0	2.0	1.3	500

NOTE: T_{rr} Conditions: I_F=0.5A, I_R=1.0A, Recovery to 0.25A.



FAST RECOVERY RECTIFIERS

SENSITRON SEMICONDUCTOR

OPERATING AND STORAGE TEMPERATURE -65°C TO +150°C

TYPE	Maximum Peak Reverse Voltage	Maximum Average Rectified Current @Half-Wave Resistive Load 60Hz		Maximum Forward Peak Surge Current @8.3ms Superimposed	Maximum Reverse Current @PRV @25°C T _A	Maximum Forward Voltage @25°C T _A		Maximum Reverse Recovery Time
	PRV	I _O @ T _A		I _{FM} (Surge)	I _R	I _{FM}	V _{FM}	T _{rr}
	V _{PK}	A _{AV}	°C	A _{PK}	μA _{dc}	V _{PK}	V _{PK}	ns

2.0 AMPERE-FAST RECOVERY / SMB



FR2A	50	2.0	90	50	5.0	2.0	1.3	150
FR2B	100	2.0	90	50	5.0	2.0	1.3	150
FR2D	200	2.0	90	50	5.0	2.0	1.3	150
FR2G	400	2.0	90	50	5.0	2.0	1.3	150
FR2J	600	2.0	90	50	5.0	2.0	1.3	250
FR2K	800	2.0	90	50	5.0	2.0	1.3	500

2.0 AMPERE-FAST RECOVERY / SMB (DO-214AA)



FR2A	50	2.0	55	50	5.0	2.0	1.3	150
FR2B	100	2.0	55	50	5.0	2.0	1.3	150
FR2D	200	2.0	55	50	5.0	2.0	1.3	150
FR2G	400	2.0	55	50	5.0	2.0	1.3	150
FR2J	600	2.0	55	50	5.0	2.0	1.3	250
FR2K	800	2.0	55	50	5.0	2.0	1.3	500
FR2M	1000	2.0	55	50	5.0	2.0	1.3	500

3.0 AMPERE-FAST RECOVERY / DO-27



FR301	50	3.0	75	200	5.0	3.0	1.3	150
FR302	100	3.0	75	200	5.0	3.0	1.3	150
FR303	200	3.0	75	200	5.0	3.0	1.3	150
FR304	400	3.0	75	200	5.0	3.0	1.3	150
FR305	600	3.0	75	200	5.0	3.0	1.3	250
FR306	800	3.0	75	200	5.0	3.0	1.3	500
FR307	1000	3.0	75	200	5.0	3.0	1.3	500
BY396	100	3.0	75	200	5.0	3.0	1.3	150
BY397	200	3.0	75	200	5.0	3.0	1.3	150
BY398	400	3.0	75	200	5.0	3.0	1.3	150
BY399	800	3.0	75	200	5.0	3.0	1.3	500

3.0 AMPERE-FAST RECOVERY / SMC



FR3A	50	3.0	75	100	10	3.0	1.3	150
FR3B	100	3.0	75	100	10	3.0	1.3	150
FR3D	200	3.0	75	100	10	3.0	1.3	150
FR3G	400	3.0	75	100	10	3.0	1.3	150
FR3J	600	3.0	75	100	10	3.0	1.3	250
FR3K	800	3.0	75	100	10	3.0	1.3	500

3.0 AMPERE-FAST RECOVERY / SMC (DO-214AB)



FR3A	50	3.0	55	100	10	3.0	1.3	150
FR3B	100	3.0	55	100	10	3.0	1.3	150
FR3D	200	3.0	55	100	10	3.0	1.3	150
FR3G	400	3.0	55	100	10	3.0	1.3	150
FR3J	600	3.0	55	100	10	3.0	1.3	250
FR3K	800	3.0	55	100	10	3.0	1.3	500
FR3M	1000	3.0	55	100	10	3.0	1.3	500

NOTE: T_{rr} Conditions: I_F=0.5A, I_R=1.0A, Recovery to 0.25A.



FAST RECOVERY RECTIFIERS

SENSITRON SEMICONDUCTOR

OPERATING AND STORAGE TEMPERATURE -65°C TO +150°C

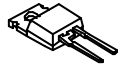
TYPE	Maximum Peak Reverse Voltage	Maximum Average Rectified Current @Half-Wave Resistive Load 60Hz		Maximum Forward Peak Surge Current @8.3ms Superimposed	Maximum Reverse Current @PRV @25°C T _A	Maximum Forward Voltage @25°C T _A		Maximum Reverse Recovery Time
	PRV	I _o @ T _A		I _{FM} (Surge)	I _R	I _{FM}	V _{FM}	T _{rr}
	V _{PK}	A _{AV}	°C	A _{PK}	μAdc	V _{PK}	V _{PK}	Ns

6.0 AMPERE-FAST RECOVERY / R-6



FR601	50	6.0	75	300	10	6.0	1.3	150
FR602	100	6.0	75	300	10	6.0	1.3	150
FR603	200	6.0	75	300	10	6.0	1.3	150
FR604	400	6.0	75	300	10	6.0	1.3	150
FR605	600	6.0	75	300	10	6.0	1.3	250
FR606	800	6.0	75	300	10	6.0	1.3	500
FR607	1000	6.0	75	300	10	6.0	1.3	500

8.0 AMPERE-FAST RECOVERY / TO-220A



FR801G*	50	8.0	100	150	5.0	8.0	1.3	150
FR802G*	100	8.0	100	150	5.0	8.0	1.3	150
FR803G*	200	8.0	100	150	5.0	8.0	1.3	150
FR804G*	400	8.0	100	150	5.0	8.0	1.3	150
FR805G*	600	8.0	100	150	5.0	8.0	1.3	250
FR806G*	800	8.0	100	150	5.0	8.0	1.3	500
FR807G*	1000	8.0	100	150	5.0	8.0	1.3	500

16.0 AMPERE-FAST RECOVERY / TO-220A



FR1601G*	50	16.0	105	250	5.0	16.0	1.3	150
FR1602G*	100	16.0	105	250	5.0	16.0	1.3	150
FR1603G*	200	16.0	105	250	5.0	16.0	1.3	150
FR1604G*	400	16.0	105	250	5.0	16.0	1.3	150
FR1605G*	600	16.0	105	250	5.0	16.0	1.3	250
FR1606G*	800	16.0	105	250	5.0	16.0	1.3	500
FR1607G*	1000	16.0	105	250	5.0	16.0	1.3	500

16.0 AMPERE-FAST RECOVERY / TO-220



FR1601G*	50	16.0	105	250	5.0	8.0	1.3	150
FR1602G*	100	16.0	105	250	5.0	8.0	1.3	150
FR1603G*	200	16.0	105	250	5.0	8.0	1.3	150
FR1604G*	400	16.0	105	250	5.0	8.0	1.3	150
FR1605G*	600	16.0	105	250	5.0	8.0	1.3	250
FR1606G*	800	16.0	105	250	5.0	8.0	1.3	500
FR1607G*	1000	16.0	105	250	5.0	8.0	1.3	500

NOTE: T_{rr} Conditions: I_F=0.5A, I_R=1.0A, Recovery to 0.25A.

“*”= Glass Passivated Die Construction