Fast Recovery Diodes - Capsule Types

Fast Recovery Diodes are an essential partner to all fast switching devices. Our soft recovery diodes are available with a range of reverse recovery characteristics tailored to meet the requirements of both freewheeling and snubber applications. These devices are available with blocking voltages up to 6kV and average currents up to 3770A. 38mm-75mm diameter silicon slices.

Type		V_{RRM}	I_{FAV} T_K=55°C	I_{FSM} 10ms ½ sine V_R ≤60% V_{RRM}	I^2t V_R ≤60% V_{RRM}	Typ. Reverse Recovery Parameters T_{JM} (50% Chord)				V_{T0} @T_{JM}	r_T @T_{JM}	T_{JM}	R_{thJK} d.c. 180° sine	Fig. No.
Part No.	Old Part No.	V	A	A	A^2s	t_{rr} µs	Q_r µC	@I_{FM} A	@-di_F/dt A/µs	V	mΩ	°C	K/W	
M0588LC400	SM40CXC344	4000	588	3955	78.2×10^3	3.5	200	1000	60	2.320	1.770	150	0.033	W4
M0588LC450	SM45CXC344	4500	588	3955	78.2×10^3	3.5	200	1000	60	2.320	1.770	150	0.033	W4
M0790YC200	N/A	2000	790	9000	405×10^3	4.0	300	1000	60	1.272	0.584	150	0.050	W2
M0790YC250	N/A	2500	790	9000	405×10^3	4.0	300	1000	60	1.272	0.584	150	0.050	W2
M0790YH200	N/A	2000	790	9000	405×10^3	4.0	300	1000	60	1.272	0.584	150	0.050	W3
M0790YH250	N/A	2500	790	9000	405×10^3	4.0	300	1000	60	1.272	0.584	150	0.050	W3
M0914LC200	SM20CXC804	2000	914	8500	361×10^3	3.2	170	1000	60	1.768	0.653	150	0.032	W4
M0914LC250	SM25CXC804	2500	914	8500	361×10^3	3.2	170	1000	60	1.768	0.653	150	0.032	W4
M1010NC400	SM40CXC604	4000	1010	9600	461×10^3	3.2	700	1000	200	1.700	1.030	150	0.022	W5
M1010NC450	SM45CXC604	4500	1010	9600	461×10^3	3.2	700	1000	200	1.700	1.030	150	0.022	W5
M1163NC400	SM40CXC614	4000	1163	10800	583×10^3	6.4	700	1000	60	1.500	0.770	150	0.022	W5
M1163NC450	SM45CXC614	4500	1163	10800	583×10^3	6.4	700	1000	60	1.500	0.770	150	0.022	W5
M1502NC200	SM20CXC334	2000	1502	17000	1.45×10^6	3.5	220	1000	60	1.240	0.440	150	0.022	W5
M1502NC250	SM25CXC334	2500	1502	17000	1.45×10^6	3.5	220	1000	60	1.240	0.440	150	0.022	W5
M1583VC400	SM40CXC864	4000	1583	24800	3.08×10^6	5.0	1100	1000	200	1.693	0.525	150	0.016	W6
M1583VC450	SM45CXC864	4500	1583	24800	3.08×10^6	5.0	1100	1000	200	1.693	0.525	150	0.016	W6
M1583VF400	SM40FXC864	4000	1583	24800	3.08×10^6	5.0	1100	1000	200	1.693	0.525	150	0.016	W43
M1583VF450	SM45FXC864	4500	1583	24800	3.08×10^6	5.0	1100	1000	200	1.693	0.525	150	0.016	W43
M1609NC200	SM20CXC915	2000	1609	17500	1.53×10^6	3.2	600	1000	200	1.310	0.345	150	0.022	W5
M1609NC260	SM26CXC915	2600	1609	17500	1.53×10^6	3.2	600	1000	200	1.310	0.345	150	0.022	W5
M2273VC300	N/A	3000	2273	28000	3.92×10^6	8.50	1300	1000	60	1.24	0.244	150	0.016	W6
M2273VC360	N/A	3600	2273	28000	3.92×10^6	8.50	1300	1000	60	1.24	0.244	150	0.016	W6
M2273VF300	N/A	3000	2273	28000	3.92×10^6	8.50	1300	1000	60	1.24	0.244	150	0.016	W43
M2273VF360	N/A	3600	2273	28000	3.92×10^6	8.50	1300	1000	60	1.24	0.244	150	0.016	W43
M2408NC020	SM02CXC504	200	2408	24000	2.88×10^6	1.9	160	1000	200	1.065	0.122	150	0.022	W5
M2408NC060	SM06CXC504	600	2408	24000	2.88×10^6	1.9	160	1000	200	1.065	0.122	150	0.022	W5
M2408ND020	SM02CXC504	200	2408	24000	2.88×10^6	1.9	160	1000	200	1.065	0.122	150	0.022	W5
M2408ND060	SM06CXC504	600	2408	24000	2.88×10^6	1.9	160	1000	200	1.065	0.122	150	0.022	W5

Figure W2
25mm - 80g

Figure W3
25mm - 140g

Figure W4 - 34mm - 340g

Figure W5 - 47mm - 510g

Figure W6 - 63mm - 1000g

Figure W43 - 63mm - 800g

Type		V_{RRM}	I_{FAV}	I_{FSM}	I^2t	Typ. Reverse Recovery Parameters T_{JM} (50% Chord)				V_{T0} r_T @T_{JM}		T_{JM}	R_{thJK}	Fig. No.
			T_K=55°C	10ms ½ sine									d.c.	
				V_R ≤60% V_{RRM}	V_R ≤60% V_{RRM}	t_{rr}	Q_r	@I_{FM}	@-di_F/dt				180° sine	
Part No.	Old Part No.	V	A	A	A^2s	µs	µC	A	A/µs	V	mΩ	°C	K/W	
M2639ZC360	SM36CXC954	3600	2639	27520	3.79×10^6	8.5	1200	1000	60	1.380	0.290	150	0.011	W7
M2639ZC420	SM42CXC954	4200	2639	27520	3.79×10^6	8.5	1200	1000	60	1.380	0.290	150	0.011	W7
M2639ZD360	SM36DXC954	3600	2639	27520	3.79×10^6	8.5	1200	1000	60	1.380	0.290	150	0.011	W42
M2639ZD420	SM42DXC954	4200	2639	27520	3.79×10^6	8.5	1200	1000	60	1.380	0.290	150	0.011	W42
M2698ZC250	SM25CXC964	2500	2698	27800	3.86×10^6	6.2	620	1000	60	1.000	0.330	150	0.011	W7
M2698ZC280	SM28CXC964	2800	2698	27800	3.86×10^6	6.2	620	1000	60	1.000	0.330	150	0.011	W7
M2698ZC350	SM35CXC964	3500	2698	27800	3.86×10^6	6.2	620	1000	60	1.000	0.330	150	0.011	W7
M2698ZD250	SM25DXC964	2500	2698	27800	3.86×10^6	6.2	620	1000	60	1.000	0.330	150	0.011	W42
M2698ZD280	SM28DXC964	2800	2698	27800	3.86×10^6	6.2	620	1000	60	1.000	0.330	150	0.011	W42
M2698ZD350	SM35DXC964	3500	2698	27800	3.86×10^6	6.2	620	1000	60	1.000	0.330	150	0.011	W42
M2837VC180	SM18CXC968	1800	2837	31800	5.1×10^6	7.0	1100	1000	60	0.900	0.170	150	0.016	W6
M2837VC250	SM25CXC968	2500	2837	31800	5.1×10^6	7.0	1100	1000	60	0.900	0.170	150	0.016	W6
M2837VF180	SM18FXC968	1800	2837	31800	5.1×10^6	7.0	1100	1000	60	0.900	0.170	150	0.016	W43
M2837VF250	SM25FXC968	2500	2837	31800	5.1×10^6	7.0	1100	1000	60	0.900	0.170	150	0.016	W43
M3770ZC200	SM20CXC974	2000	3770	44000	9.68×10^6	7.0	1500	1000	60	1.190	1.180	150	0.011	W7
M3770ZC240	SM24CXC974	2400	3770	44000	9.68×10^6	7.0	1500	1000	60	1.190	1.180	150	0.011	W7
M3770ZC300	SM30CXC974	3000	3770	44000	9.68×10^6	7.0	1500	1000	60	1.190	1.180	150	0.011	W7
M3770ZD200	SM20DXC974	2000	3770	44000	9.68×10^6	7.0	1500	1000	60	1.190	1.180	150	0.011	W42
M3770ZD240	SM24DXC974	2400	3770	44000	9.68×10^6	7.0	1500	1000	60	1.190	1.180	150	0.011	W42
M3770ZD300	SM30DXC974	3000	3770	44000	9.68×10^6	7.0	1500	1000	60	1.190	1.180	150	0.011	W42

Figure W6 - 63mm - 1000g

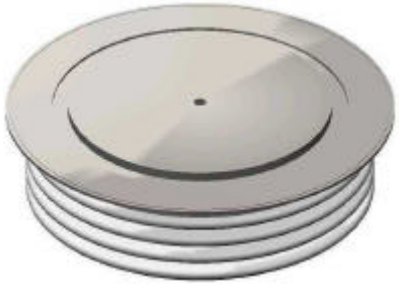

Figure W7 - 73mm - 1700g

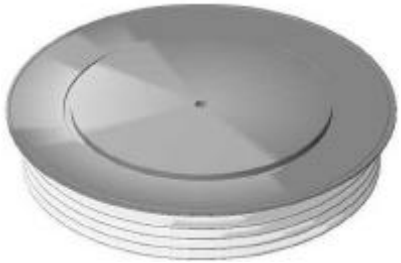

Figure W42 - 73mm - 1200g

Figure W43 - 63mm - 800g