




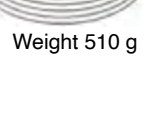






# Fast Recovery Diodes

Fast Recovery Diodes are an essential complement to any switching device and are more often than not the limiting factor in the design and performance of modern power converters. To address the needs of our customers, we have developed an unparalleled range of Fast Recovery Diodes. These diodes are available with blocking voltages up to 6.5 kV making them suitable for operation with DC link voltages up to 3.3 kV and average current ratings to 4 kA depending upon type. The devices utilise both alloyed and floating silicon technologies to deliver robust devices that you can rely on in demanding applications. This range has been sub-classified as follows to aid appropriate device selection; Fast Recovery, Soft Recovery, Extra Fast Recovery Diodes and HP Sonic-FRDs.

## Standard Fast Recovery Capsule Types

These parts are particularly suitable for use as anti-parallel diodes in Gate Turn-Off thyristors and Fast Thyristor inverters, diodes for choppers.

Part No.	V <sub>RRM</sub> V	I <sub>FAV</sub> T <sub>K</sub> = 55°C A	I <sub>FSM</sub> A	I <sup>2</sup> t 10 ms ½ sine V <sub>R</sub> ≤ 60% V <sub>RRM</sub> A <sup>2</sup> s	Typ. Reverse Recovery T <sub>J</sub> = 150°C				V <sub>TO</sub> V	r <sub>T</sub> mΩ	T <sub>JM</sub> °C	R <sub>thJK</sub> d.c. 180° sine K/W	Fig. No.	Package style Outlines on pages O-01...O-35 
					t <sub>tr</sub> μs	Q <sub>rr</sub> μC	@ I <sub>FM</sub> A	@ -di <sub>F</sub> /dt A/μs						
M0588LC400	4000	588	3955	78.2 x 10 <sup>3</sup>	3.50	450	1000	60	2.320	1.770	150	0.0330	W4	 W2 Weight 80 g
M0588LC450	4500	588	3955	78.2 x 10 <sup>3</sup>	3.50	450	1000	60	2.320	1.770	150	0.0330	W4	
M0790YC200	2000	790	9000	405 x 10 <sup>3</sup>	4.00	425	1000	60	1.272	0.584	150	0.0500	W2	 W2 Weight 80 g
M0790YC250	2500	790	9000	405 x 10 <sup>3</sup>	4.00	425	1000	60	1.272	0.584	150	0.0500	W2	
M0790YH200	2000	790	9000	405 x 10 <sup>3</sup>	4.00	425	1000	60	1.272	0.584	150	0.0500	W3	 W3 Weight 140 g
M0790YH250	2500	790	9000	405 x 10 <sup>3</sup>	4.00	425	1000	60	1.272	0.584	150	0.0500	W3	
M0914LC200	2000	914	8500	361 x 10 <sup>3</sup>	3.20	300	1000	60	1.768	0.653	150	0.0320	W4	 W3 Weight 140 g
M0914LC250	2500	914	8500	361 x 10 <sup>3</sup>	3.20	300	1000	60	1.768	0.653	150	0.0320	W4	
M1010NC400	4000	1010	9600	461 x 10 <sup>3</sup>	3.20	1450	1000	200	1.700	1.030	150	0.0220	W5	 W4 Weight 340 g
M1010NC450	4500	1010	9600	461 x 10 <sup>3</sup>	3.20	1450	1000	200	1.700	1.030	150	0.0220	W5	
M1010ND400	4000	1010	9600	461 x 10 <sup>3</sup>	3.20	1450	1000	200	1.700	1.030	150	0.0220	W37	 W5 Weight 510 g
M1010ND450	4500	1010	9600	461 x 10 <sup>3</sup>	3.20	1450	1000	200	1.700	1.030	150	0.0220	W37	
M1163NC400	4000	1163	10800	583 x 10 <sup>3</sup>	6.40	1200	1000	60	1.500	0.770	150	0.0220	W5	 W6 Weight 1 kg
M1163NC450	4500	1163	10800	583 x 10 <sup>3</sup>	6.40	1200	1000	60	1.500	0.770	150	0.0220	W5	
M1163ND400	4000	1163	10800	583 x 10 <sup>3</sup>	6.40	1200	1000	60	1.500	0.770	150	0.0220	W37	 W6 Weight 1 kg
M1163ND450	4500	1163	10800	583 x 10 <sup>3</sup>	6.40	1200	1000	60	1.500	0.770	150	0.0220	W37	
M1502NC200	2000	1502	17000	1.45 x 10 <sup>6</sup>	3.50	350	1000	60	1.240	0.440	150	0.0220	W5	 W6 Weight 1 kg
M1502NC250	2500	1502	17000	1.45 x 10 <sup>6</sup>	3.50	350	1000	60	1.240	0.440	150	0.0220	W5	
M1502ND200	2000	1502	17000	1.45 x 10 <sup>6</sup>	3.50	350	1000	60	1.240	0.440	150	0.0220	W37	 W6 Weight 1 kg
M1502ND250	2500	1502	17000	1.45 x 10 <sup>6</sup>	3.50	350	1000	60	1.240	0.440	150	0.0220	W37	
M1583VC400	4000	1583	24800	3.08 x 10 <sup>6</sup>	5.00	2000	1000	200	1.693	0.525	150	0.0160	W6	 W6 Weight 1 kg
M1583VC450	4500	1583	24800	3.08 x 10 <sup>6</sup>	5.00	2000	1000	200	1.693	0.525	150	0.0160	W6	
M1583VF400	4000	1583	24800	3.08 x 10 <sup>6</sup>	5.00	2000	1000	200	1.693	0.525	150	0.0160	W43	 W6 Weight 1 kg
M1583VF450	4500	1583	24800	3.08 x 10 <sup>6</sup>	5.00	2000	1000	200	1.693	0.525	150	0.0160	W43	
M1609NC200	2000	1609	17500	1.53 x 10 <sup>6</sup>	3.20	800	1000	200	1.310	0.345	150	0.0220	W5	 W6 Weight 1 kg
M1609NC260	2600	1609	17500	1.53 x 10 <sup>6</sup>	3.20	800	1000	200	1.310	0.345	150	0.0220	W5	
M1609ND200	2000	1609	17500	1.53 x 10 <sup>6</sup>	3.20	800	1000	200	1.310	0.345	150	0.0220	W37	 W6 Weight 1 kg
M1609ND260	2600	1609	17500	1.53 x 10 <sup>6</sup>	3.20	800	1000	200	1.310	0.345	150	0.0220	W37	
M2273VC300	3000	2273	28000	3.92 x 10 <sup>6</sup>	8.50	2500	1000	60	1.239	0.244	150	0.0160	W6	 W6 Weight 1 kg
M2273VC360	3600	2273	28000	3.92 x 10 <sup>6</sup>	8.50	2500	1000	60	1.239	0.244	150	0.0160	W6	
M2273VF300	3000	2273	28000	3.92 x 10 <sup>6</sup>	8.50	2500	1000	60	1.239	0.244	150	0.0160	W43	 W6 Weight 1 kg
M2273VF360	3600	2273	28000	3.92 x 10 <sup>6</sup>	8.50	2500	1000	60	1.239	0.244	150	0.0160	W43	
M2325HA400	4000	2325	28000	3.92 x 10 <sup>6</sup>	5.40	2300	1000	200	1.581	0.402	150	0.0105	W121	 W6 Weight 1 kg
M2325HA450	4500	2325	28000	3.92 x 10 <sup>6</sup>	5.40	2300	1000	200	1.581	0.402	150	0.0105	W121	