

# High Power Sonic FRD's - Capsule Types

# WESTCODE

Introducing a world-leading class of ultra fast and ultra soft recovery diode available from 1.7 kV to 4.5 kV in current ratings from 300 A to 4000 A. These diodes incorporate a unique manufacturing process and lifetime control to offer a class leading trade-off between conduction and switching losses. The wide safe operating area (SOA) makes them ideal as freewheeling diodes for snubberless IGBT and IGCT applications. In fact, any application which requires a fast, low loss diode. For example, traction, medium voltage drives, induction heating and pulsed power applications.

Type 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>JM</sub> (50% Chord)					V <sub>TO</sub> V	r <sub>T</sub> mΩ	T <sub>JM</sub> °C	R <sub>thJK</sub> 180° Sine K/W	Fig. No.
					I <sub>m</sub> A	t <sub>rr</sub> μs	Q <sub>r</sub> μC	@ I <sub>FM</sub> A	@ -di <sub>F</sub> /dt A/μs					
➤ E0170YH40C*	4000	208	1800	16.2×10 <sup>3</sup>	150	TBC	275	170	200	2.340	7.650	150	0.073	W3
➤ E0170YH45C*	4500	208	1800	16.2×10 <sup>3</sup>	150	TBC	275	170	200	2.340	7.650	150	0.073	W3
➤ E0280YH20C*	2000	391	3200	51.2×10 <sup>3</sup>	225	TBC	520	280	300	1.660	1.720	150	0.073	W3
➤ E0280YH25C*	2500	391	3200	51.2×10 <sup>3</sup>	225	TBC	520	280	300	1.660	1.720	150	0.073	W3
➤ E0460QC40C*	4000	528	4900	120×10 <sup>3</sup>	450	TBC	750	500	600	2.200	2.910	150	0.029	W68
➤ E0460QC45C*	4500	528	4900	120×10 <sup>3</sup>	450	TBC	750	500	600	2.200	2.910	150	0.029	W68
➤ E0660NC40C*	4000	783	7100	252×10 <sup>3</sup>	625	TBC	1100	660	850	2.270	1.960	150	0.020	W5
➤ E0660NC45C*	4500	783	7100	252×10 <sup>3</sup>	625	TBC	1100	660	850	2.270	1.960	150	0.020	W5
➤ E0660NH40C*	4500	783	7100	252×10 <sup>3</sup>	625	TBC	1100	660	850	2.270	1.960	150	0.020	W47
➤ E0660NH45C*	4500	783	7100	252×10 <sup>3</sup>	625	TBC	1100	660	850	2.270	1.960	150	0.020	W47
➤ E0800QC20C*	2000	1015	8900	396×10 <sup>3</sup>	640	TBC	1450	800	900	1.620	0.640	150	0.029	W68
➤ E0800QC25C*	2500	1015	8900	396×10 <sup>3</sup>	640	TBC	1450	800	900	1.620	0.640	150	0.029	W68
➤ E1200NC20C*	2000	1473	12900	832×10 <sup>3</sup>	920	TBC	2100	1200	1300	1.620	0.440	150	0.020	W5
➤ E1200NC25C*	2500	1473	12900	832×10 <sup>3</sup>	920	TBC	2100	1200	1300	1.620	0.440	150	0.020	W5
➤ E1200NH20C*	2000	1473	12900	832×10 <sup>3</sup>	920	TBC	2100	1200	1300	1.620	0.440	150	0.020	W47
➤ E1200NH25C*	2500	1473	12900	832×10 <sup>3</sup>	920	TBC	2100	1200	1300	1.620	0.440	150	0.020	W47
➤ E1300VF40C*	4000	1312	14000	980×10 <sup>3</sup>	1200	TBC	2150	1300	1500	2.130	1.060	150	0.013	W43
➤ E1300VF45C*	4500	1312	14000	980×10 <sup>3</sup>	1200	TBC	2150	1300	1500	2.130	1.060	150	0.013	W43
E1500NC36P	3600	1280	17050	1.45×10 <sup>6</sup>	1425	2.80	2750	1000	1000	1.417	0.656	140	0.019	W5
E1500NC42P	4200	1280	17050	1.45×10 <sup>6</sup>	1425	2.80	2750	1000	1000	1.417	0.656	140	0.019	W5
E1500NC48P	4800	1280	17050	1.45×10 <sup>6</sup>	1425	2.80	2750	1000	1000	1.417	0.656	140	0.019	W5
E1500NH36P	3600	1280	17050	1.45×10 <sup>6</sup>	1425	2.80	2750	1000	1000	1.417	0.656	140	0.019	W47
E1500NH42P	4200	1280	17050	1.45×10 <sup>6</sup>	1425	2.80	2750	1000	1000	1.417	0.656	140	0.019	W47
E1500NH48P	4800	1280	17050	1.45×10 <sup>6</sup>	1425	2.80	2750	1000	1000	1.417	0.656	140	0.019	W47
E2000NC140	1400	1568	15000	1.13×10 <sup>6</sup>	1870	1.00	1670	2000	4000	1.770	0.350	150	0.020	W5
E2000NC170	1700	1568	15000	1.13×10 <sup>6</sup>	1870	1.00	1670	2000	4000	1.770	0.350	150	0.020	W5
E2000NH140	1400	1568	15000	1.13×10 <sup>6</sup>	1870	1.00	1670	2000	4000	1.770	0.350	150	0.020	W47
E2000NH170	1700	1568	15000	1.13×10 <sup>6</sup>	1870	1.00	1670	2000	4000	1.770	0.350	150	0.020	W47
➤ E2250VF20C*	2000	2426	25200	3.17×10 <sup>6</sup>	1650	1.90	3700	2250	2500	1.510	0.250	150	0.013	W43
➤ E2250VF25C*	2500	2426	25200	3.17×10 <sup>6</sup>	1650	1.90	3700	2250	2500	1.510	0.250	150	0.013	W43
➤ E2400TC40C*	4000	2233	25600	3.29×10 <sup>6</sup>	2050	1.50	3700	2400	3000	2.060	0.590	150	0.008	W28
➤ E2400TC45C*	4500	2233	25600	3.29×10 <sup>6</sup>	2050	1.50	3700	2400	3000	2.060	0.590	150	0.008	W28
➤ E4000TC20C*	2000	4080	50000	12.5×10 <sup>6</sup>	2400	2.50	6700	4000	3500	1.406	0.149	150	0.008	W28
➤ E4000TC25C*	2500	4080	50000	12.5×10 <sup>6</sup>	2400	2.50	6700	4000	3500	1.406	0.149	150	0.008	W28

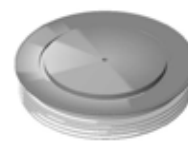
\* provisional data



W3 Weight 140 g



W5 Weight 510 g



W28 Weight 1230 g



W43 Weight 800 g



W47 Weight 250 g



W68 Weight 300 g