



engineered components company

Over the past several years, we have produced many special versions of our TTL Schottky Compatible Logic Delay Modules for use in supplying memory timing for specific customer memory applications utilizing both static and dynamic RAMs.

The following tabulation shows some of the special parts which have been developed for specific memory timing applications. This list is in no way meant to be limiting of parts which have been developed to date, it is merely to show the variety of specials which are capable of being developed to satisfy specific customer applications.

<u>PART NUMBER</u>	<u>NUMBER OF OUTPUTS</u>	<u>OUTPUT DELAY TIMES</u>	<u>COMMENTS</u>
DM10-784*	2	22, 44ns	
DM10-389	2	25, 50ns	50ns at Pin 8, tap 25ns at Pin 10
DM10-422	2	25, 50ns	50ns at Pin 4, tap 25ns at Pin 12
DM10-711*	2	25, 50ns	For 6 Mhz square wave operation
DM10-772*	2	27, 30ns	
DM10-599	2	27, 36ns	
DM10-478	2	30, 40ns	
DM10-629	2	30, 60ns	
DM10-423	2	30, 70ns	
DM10-701*	2	35, 55ns	
DM10-408	2	35, 65ns	
DM10-744*	2	35, 73ns	Falling edge delay times with negative input pulse
DM10-665	2	35, 75ns	
DM10-749*	2	35, 75ns	Tight accuracy over temperature
DM10-751*	2	37, 59ns	
DM10-759*	2	38, 61ns	
DM10-362	2	40, 55ns	
DM10-337	2	40, 80ns	80ns at Pin 6, tap 40ns at Pin 4
DM10-370	2	40, 80ns	80ns at Pin 8, tap 40ns at Pin 10
DM10-512	2	45, 90ns	
DM10-430	2	45, 145ns	
DM10-719*	2	50, 100ns	Falling edge delay times with negative input pulse
DM10-326	2	50, 100ns	

*Items added since last issue.

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<u>PART NUMBER</u>	<u>NUMBER OF OUTPUTS</u>	<u>OUTPUT DELAY TIMES</u>	<u>COMMENTS</u>
DM10-350	2	50, 250ns	
DM10-448	2	55, 130ns	3 Mhz square wave operation
DM10-605	2	55, 135ns	
DM10-600	2	65, 100ns	
DM10-355	2	65, 110ns	
DM10-328	2	75, 153ns	
DM10-390	2	80, 125ns	
DM10-733*	2	90, 150ns	
DM10-331	2	90, 180ns	
DM10-426	2	100, 200ns	
DM10-722*	2	110, 275ns	
DM10-354	2	120, 180ns	
DM10-347	2	120, 240ns	
DM10-429	2	125, 240ns	
DM10-437	2	125, 250ns	
DM10-438	2	150, 300ns	
DM10-358	2	154, 205ns	
DM10-731*	2	162, 228ns	
DM10-698*	3	8, 74, 124ns	Falling edge delay times with negative input pulse
DM10-467	3	10, 40, 70ns	Falling edge delay times with negative input pulse
DM10-793*	3	15, 75, 100ns	
DM10-712*	3	25, 40, 80ns	
DM10-549	3	25, 50, 130ns	
DM10-792*	3	25, 60, 155ns	
DM10-510	3	25, 77, 120ns	
DM10-742*	3	28, 75, 116ns	
DM10-556	3	30, 50, 200ns	
DM10-739*	3	30, 60, 75ns	Falling edge delay times with negative input pulse
DM10-372	3	30, 60, 90ns	
DM10-341	3	30, 90, 120ns	
DM10-466	3	30, 90, 130ns	
DM10-557	3	35, 55, 180ns	
DM10-492	3	36, 48, 60ns	

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<u>PART NUMBER</u>	<u>NUMBER OF OUTPUTS</u>	<u>OUTPUT DELAY TIMES</u>	<u>COMMENTS</u>
DM10-633	3	40, 60, 180ns	
DM10-696	3	40, 75, 185ns	
DM10-622	3	40, 75, 200ns	
DM10-755*	3	40, 105, 145ns	
DM10-679	3	50, 100, 150ns	
DM10-446	3	50, 150, 250ns	
DM10-342	3	55, 185, 230ns	Tri-state module
DM10-447	3	70, 250, 380ns	
DM10-494	3	75, 350, 560ns	
DM10-627	3	80, 160, 320ns	
DM10-345	3	100, 140, 150ns	
DM10-509	3	100, 200, 300ns	
DM10-451	3	100, 250, 375ns	
DM10-401	3	100, 300, 400ns	
DM10-726*	3	102, 143, 180ns	
DM10-788*	3	125, 250, 500ns	
DM10-468	3	150, 180, 210ns	
DM10-402	4	5, 10, 15, 20ns	
DM10-779*	4	8, 13, 40, 45ns	
DM10-402	4	10, 20, 50, 110ns	
DM10-410	4	10, 30, 50, 110ns	
DM10-688	4	10, 40, 45, 150ns	
DM10-464	4	10, 40, 50, 80ns	
DM10-690	4	10, 45, 80, 180ns	
DM10-673	4	11, 41, 70, 95ns	
DM10-753*	4	13, 42, 151, 189ns	
DM10-685	4	15, 20, 25, 100ns	
DM10-615	4	15, 35, 65, 95ns	
DM10-741*	4	16, 33, 90, 114ns	Falling edge delay times with negative input pulse
DM10-709*	4	20, 40, 60, 70ns	
DM10-767*	4	20, 40, 60, 70ns	Falling edge delay times with negative input pulse
DM10-727*	4	20, 40, 60, 80ns	
DM10-732*	4	20, 40, 60, 90ns	
DM10-723*	4	20, 45, 70, 160ns	

*Items added since last issue.

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<u>PART NUMBER</u>	<u>NUMBER OF OUTPUTS</u>	<u>OUTPUT DELAY TIMES</u>	<u>COMMENTS</u>
DM10-460	4	20, 50, 60, 170ns	
DM10-419	4	20, 65, 115, 150ns	
DM10-706*	4	21, 51, 108, 161ns	
DM10-718*	4	23, 47, 105, 136ns	
DM10-737*	4	24, 26, 28, 30ns	
DM10-616	4	25, 45, 150, 150ns	
DM10-707*	4	25, 50, 75, 150ns	
DM10-443	4	27, 72, 112, 160ns	Falling edge delay times with negative input pulse
DM10-716*	4	28, 53, 133, 166ns	
DM10-689	4	30, 45, 90, 240ns	
DM10-699*	4	30, 55, 114, 172ns	Falling edge delay times with negative input pulse
DM10-428	4	30, 60, 85, 220ns	
DM10-771*	4	30, 60, 90, 320ns	
DM10-766*	4	32, 47, 74, 200ns	
DM10-670	4	34, 56, 196, 308ns	
DM10-584	4	35, 50, 130, 170ns	
DM10-778*	4	35, 53, 105, 158ns	
DM10-754*	4	35, 60, 80, 135ns	
DM10-550	4	35, 61, 146, 157ns	
DM10-721*	4	35, 70, 105, 140ns	
DM10-634	4	39, 67, 150, 250ns	
DM10-799*	4	40, 90, 135, 200ns	
DM10-729*	4	45, 50, 190, 200ns	
DM10-490	4	50, 70, 100, 170ns	
DM10-691	4	50, 70, 110, 285ns	
DM10-757*	4	50, 100, 150, 350ns	
DM10-353	4	55, 150, 185, 230ns	Tri-state module
DM10-458	4	60, 75, 180, 345ns	
DM10-495	4	60, 85, 180, 395ns	
DM10-459	4	75, 350, 560, 855ns	
DM10-421	4	81, 116, 235, 318ns	
DM10-728*	4	95, 120, 130, 215ns	
DM10-477	4	100, 150, 250, 350ns	
DM10-361	4	105, 215, 245, 280ns	
DM10-765*	4	136, 189, 295, 558ns	
DM10-700*	4	300, 340, 460, 500ns	

*Items added since last issue.

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<u>PART NUMBER</u>	<u>NUMBER OF OUTPUTS</u>	<u>OUTPUT DELAY TIMES</u>	<u>COMMENTS</u>
DM10-406	5	5, 10, 15, 20, 25ns	Delay tolerances at ± 1 ns
DM10-708*	5	6, 10, 14, 18, 22ns	
DM10-736*	5	10, 20, 30, 40, 50ns	Falling edge delay times with negative input pulse
DM10-334	5	10, 20, 30, 40, 50ns	Tri-state version of our standard TTLDM-50
DM10-517	5	10, 42, 68, 134, 245ns	
DM10-623	5	11, 21, 31, 41, 51ns	
DM10-763*	5	13, 55, 105, 200, 225ns	
DM10-725*	5	14, 28, 42, 56, 70ns	
DM10-770*	5	15, 20, 30, 40, 50ns	
DM10-455	5	15, 60, 120, 150, 180ns	
DM10-785*	5	16, 26, 39, 46, 56ns	
DM10-375	5	18, 38, 123, 168, 190ns	
DM10-493	5	18, 55, 65, 115, 175ns	
DM10-740*	5	19, 40, 105, 136, 152ns	
DM10-796*	5	20, 27, 51, 75, 100ns	Falling edge delay times with negative input pulse
DM10-710*	5	20, 30, 40, 50, 100ns	
DM10-797*	5	20, 36, 60, 80, 100ns	
DM10-551	5	20, 38, 123, 168, 190ns	
DM10-777*	5	20, 40, 80, 95, 145ns	
DM10-554	5	20, 168, 247, 360, 419ns	
DM10-704*	5	21, 26, 52, 108, 161ns	
DM10-435	5	21, 35, 50, 80, 139ns	
DM10-738*	5	23, 25, 27, 29, 31ns	
DM10-743*	5	28, 43, 50, 162, 190ns	Falling edge delay times with negative input pulse
DM10-469	5	23, 32, 139, 280, 342ns	
DM10-491	5	25, 34, 60, 200, 213ns	
DM10-436	5	25, 36, 80, 120, 145ns	
DM10-403	5	25, 36, 80, 133, 145ns	
DM10-374	5	25, 36, 80, 153, 165ns	
DM10-415	5	25, 45, 160, 185, 340ns	
DM10-382A	5	25, 50, 80, 130, 140ns	
DM10-379	5	25, 50, 80, 130, 150ns	
DM10-619	5	25, 50, 100, 125, 150ns	
DM10-613	5	25, 85, 150, 200, 300ns	

*Items added since last issue.

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<u>PART NUMBER</u>	<u>NUMBER OF OUTPUTS</u>	<u>OUTPUT DELAY TIMES</u>	<u>COMMENTS</u>
DM10-552	5	25, 100, 150, 200, 250ns	
DM10-601	5	26, 45, 60, 85, 100ns	
DM10-610	5	26, 45, 66, 93, 100ns	
DM10-373	5	27, 36, 110, 190, 200ns	
DM10-614	5	27, 73, 115, 115, 234ns	
DM10-764*	5	28, 53, 71, 133, 165ns	
DM10-515	5	28, 43, 132, 221, 246ns	
DM10-783*	5	28, 59, 89, 163, 190ns	
DM10-747*	5	28, 79, 120, 162, 250ns	
DM10-420	5	30, 40, 64, 250, 270ns	
DM10-441	5	30, 42, 65, 250, 270ns	
DM10-332	5	30, 45, 60, 90, 120ns	Tri-state module
DM10-333	5	30, 45, 60, 90, 120ns	Same as the DM10-332 but standard TTL Schottky
DM10-454	5	30, 52, 120, 160, 200ns	
DM10-693	5	30, 55, 145, 168, 200ns	
DM10-631	5	30, 60, 90, 150, 240ns	
DM10-496	5	30, 60, 200, 260, 340ns	
DM10-416	5	30, 80, 220, 250, 400ns	
DM10-506	5	30, 85, 205, 275, 325ns	
DM10-745*	5	31, 46, 100, 128, 218ns	
DM10-608	5	31, 57, 134, 162, 210ns	
DM10-589	5	31, 57, 162, 167, 248ns	
DM10-677	5	34, 54, 80, 140, 180ns	
DM10-620	5	35, 50, 75, 200, 220ns	
DM10-369	5	35, 60, 90, 150, 230ns	
DM10-400	5	35, 60, 110, 150, 215ns	
DM10-433	5	35, 60, 150, 175, 235ns	
DM10-432	5	35, 68, 95, 123, 197ns	
DM10-680	5	35, 68, 95, 123, 197ns	
DM10-735*	5	39, 61, 82, 165, 195ns	
DM10-717*	5	40, 50, 60, 80, 100ns	
DM10-703*	5	40, 50, 75, 100, 125ns	
DM10-450	5	40, 60, 100, 140, 200ns	
DM10-695	5	40, 80, 120, 150, 200ns	

*Items added since last issue.

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<u>PART NUMBER</u>	<u>NUMBER OF OUTPUTS</u>	<u>OUTPUT DELAY TIMES</u>	<u>COMMENTS</u>
DM10-405	5	40, 80, 120, 160, 200ns	
DM10-424	5	40, 80, 120, 320, 400ns	
DM10-417	5	40, 100, 265, 290, 440ns	
DM10-603	5	43, 85, 113, 113, 232ns	
DM10-591	5	45, 60, 90, 105, 120ns	
DM10-694	5	45, 65, 105, 300, 410ns	
DM10-407	5	45, 90, 135, 180, 225ns	
DM10-516	5	46, 133, 134, 147, 167ns	
DM10-676	5	47, 75, 168, 214, 258ns	
DM10-756*	5	50, 75, 100, 150, 250ns	
DM10-351	5	50, 90, 265, 315, 410ns	Tri-state module
DM10-621	5	50, 100, 150, 200, 300ns	
DM10-465	5	50, 100, 150, 350, 400ns	
DM10-587	5	50, 100, 150, 350, 400ns	
DM10-672	5	53, 74, 160, 220, 300ns	
DM10-409	5	55, 100, 155, 345, 375ns	Falling edge delay times with negative input pulse
DM10-335	5	55, 175, 185, 220, 230ns	Tri-state module
DM10-442	5	58, 76, 100, 150, 250ns	
DM10-425	5	60, 75, 100, 150, 250ns	
DM10-498	5	60, 120, 150, 160, 200ns	
DM10-592	5	80, 100, 160, 180, 200ns	
DM10-418	5	85, 140, 320, 345, 515ns	
DM10-348	5	95, 150, 325, 435, 505ns	Tri-state module
DM10-602	5	100, 125, 145, 165, 200ns	
DM10-371	5	100, 150, 190, 220, 300ns	Tri-state module
DM10-378	5	100, 150, 200, 215, 290ns	Tri-state module
DM10-611	5	100, 163, 180, 203, 250ns	
DM10-720*	5	100, 200, 225, 325, 350ns	
DM10-356	5	100, 200, 390, 420, 475ns	Tri-state module
DM10-343	5	100, 200, 390, 445, 475ns	Tri-state module
DM10-357	5	105, 205, 245, 285, 315ns	
DM10-434	5	111, 200, 275, 338, 460ns	
DM10-474	5	120, 160, 190, 375, 415ns	
DM10-476	5	120, 165, 205, 260, 425ns	
DM10-612	5	127, 173, 215, 215, 334ns	

*Items added since last issue.

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<u>PART NUMBER</u>	<u>NUMBER OF OUTPUTS</u>	<u>OUTPUT DELAY TIMES</u>	<u>COMMENTS</u>
DM10-368	5	150, 250, 300, 350, 400ns	
DM10-500	5	150, 200, 250, 400, 450ns	
DM10-472	5	160, 180, 200, 220, 240ns	
DM10-344	5	200, 300, 400, 500, 600ns	
DM10-392	5	240, 280, 320, 360, 400ns	
DM10-439	6	40, 80, 120, 160, 200, 350ns	Last output unbuffered and inverted.
DM10-445	6	40, 80, 120, 160, 200, 370ns	Last output unbuffered and inverted.
DM10-413	6	40, 80, 120, 160, 200, 400ns	Last output unbuffered and inverted.

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