Multi Discrete Modules (MDMs)

Integrating different device types into a single package often facilitates assembly cost reductions. MOSFETs and diodes, MOSFETs and rectifiers, transistors and rectifiers, and other custom combinations are available.

MDM™ Multi Discrete Module

SOT-563 Case

1.7 x 1.7 x 0.6

TLM832D Case

3.1 x 2.1 x 1.0

Package dimensions shown are maximum values in mm.

N-Channel MOSFET and Low V_F Schottky Diode

			N-Channel MOSFET									Low V_F Schottky Diode				
TYPE NO.	CASE	DESCRIPTION	BV_{DSS} (V)	I_D (mA)	$r_{DS(ON)}$ (Ω)	@ I_D (A)	@ V_{GS} (V)	$V_{GS(th)}$ (V)		t_{on}, t_{off} (ns)		V_{RRM} (V)	I_F (mA)	V_F (V)	@ I_F (mA)	C_T (pF)
			MIN	MAX	MAX			MIN	MAX	MAX		MAX	MAX	MAX		MAX
CMLM0205	SOT-563	**Combination:** N-Channel MOSFET and Low V_F Schottky diode	60	280	2.0 3.0	0.5 0.05	10 5.0	1.0	2.5	20	+	40	500	0.27 0.35 0.47	10 100 500	50
CMLM0574	SOT-563	**Combination:** N-Channel MOSFET and Low V_F Schottky diode	30	450	0.46 0.56 0.73	0.2 0.1 0.075	4.5 2.5 1.8	0.5	1.0	– / –	+	40	500	0.27 0.35 0.47	10 100 500	50
CMLM0575	SOT-563	**Combination:** N-Channel MOSFET and Low V_F Schottky diode	20	650	0.23 0.275 0.7	0.6 0.5 0.35	4.5 2.5 1.8	0.5	1.1	10, 25 (TYP)	+	40	500	0.27 0.35 0.47	10 100 500	50
CTLM7110-M832D	TLM832D	**Combination:** N-Channel MOSFET and Low V_F Schottky diode	20	1000	0.10 0.14 0.25	0.5 0.5 0.1	4.5 2.5 1.5	0.5	1.2	25, 140 (TYP)	+	40	1000	0.29 0.36 0.45 0.55	10 100 500 1000	–

P-Channel MOSFET and Low V_F Schottky Diode

			P-Channel MOSFET									Low V_F Schottky Diode				
TYPE NO.	CASE	DESCRIPTION	BV_{DSS} (V)	I_D (mA)	$r_{DS(ON)}$ (Ω)	@ I_D (A)	@ V_{GS} (V)	$V_{GS(th)}$ (V)		t_{on}, t_{off} (ns)		V_{RRM} (V)	I_F (mA)	V_F (V)	@ I_F (mA)	C_T (pF)
			MIN	MAX	MAX			MIN	MAX	MAX		MAX	MAX	MAX		MAX
CMLM0584	SOT-563	**Combination:** P-Channel MOSFET and Low V_F Schottky diode	30	450	1.1 2.0 3.3	0.43 0.2 0.1	4.5 2.5 1.8	0.5	1.0	– / –	+	40	500	0.27 0.35 0.47	10 100 500	50
CMLM0585	SOT-563	**Combination:** P-Channel MOSFET and Low V_F Schottky diode	20	650	0.36 0.5 0.8	0.35 0.3 0.15	4.5 2.5 1.8	0.5	1.0	38, 48 (TYP)	+	40	500	0.27 0.35 0.47	10 100 500	50
CMLM0305	SOT-563	**Combination:** P-Channel MOSFET and Low V_F Schottky diode	50	280	2.0 2.5 3.0	0.05 0.05 0.05	5.0 2.5 1.8	0.75	1.2	–	+	40	500	0.27 0.35 0.47	10 100 500	50
CMLM0305T	SOT-563	**Combination:** P-Channel MOSFET and Low V_F Schottky diode	50	280	1.5 1.9 2.3	0.05 0.05 0.05	5.0 2.5 1.8	0.75	1.2	–	+	40	500	0.27 0.35 0.47	10 100 500	50
CMLM8205	SOT-563	**Combination:** P-Channel MOSFET and Low V_F Schottky diode	50	280	2.5 3.0	0.5 0.05	10 5.0	1.0	2.5	20	+	40	500	0.27 0.35 0.47	10 100 500	50
CTLM8110-M832D	TLM832D	**Combination:** P-Channel MOSFET and Low V_F Schottky diode	20	860	0.150 0.142 0.200 0.240	0.95 0.77 0.67 0.2	4.5 4.5 2.5 1.8	0.45	1.0	20, 25 (TYP)	+	40	1000	0.45	500	–

MDM™ Multi Discrete Module (continued)

1.7 x 1.7 x 0.6

SOT-563 Case

3.1 x 2.1 x 1.0

TLM832D Case

Package dimensions shown are maximum values in mm.

Low $V_{CE(SAT)}$ Small Signal Transistor and Low V_F Schottky Diode

			Low $V_{CE(SAT)}$ Small Signal Transistor							Low V_F Schottky Diode				
TYPE NO.	CASE	DESCRIPTION	BV_{CBO} (V) MIN	BV_{CEO} (V) MIN	BV_{EBO} (V) MIN	$V_{CE(SAT)}$ (V) TYP	$V_{CE(SAT)}$ (V) MAX	@ I_C (mA)		V_{RRM} (V) MAX	I_F (mA) MAX	V_F (V) MAX	@ I_F (mA)	C_T (pF) MAX
CMLM0405	SOT-563	**Combination:** Low $V_{CE(SAT)}$ General Purpose NPN transistor and Low V_F Schottky diode	60	40	6.0	0.057 0.090	0.1 0.2	10 50	**+**	40	500	0.27 0.35 0.47	10 100 500	50
CMLM0605	SOT-563	**Combination:** Low $V_{CE(SAT)}$ General Purpose PNP transistor and Low V_F Schottky diode	60	40	6.0	0.05 0.10	0.1 0.2	10 50	**+**	40	500	0.27 0.35 0.47	10 100 500	50
CMLM0705	SOT-563	**Combination:** Low $V_{CE(SAT)}$ General Purpose PNP transistor and Low V_F Schottky diode	60	60	5.0	0.113 0.280	0.2 0.7	150 500	**+**	40	500	0.27 0.35 0.47	10 100 500	50
CMLM2205	SOT-563	**Combination:** Low $V_{CE(SAT)}$ General Purpose NPN transistor and Low V_F Schottky diode	100	45	6.0	0.09 0.12	0.15 0.50	150 500	**+**	40	500	0.27 0.35 0.47	10 100 500	50
CMLM3405	SOT-563	**Combination:** Low $V_{CE(SAT)}$ General Purpose NPN transistor and Low V_F Schottky diode	40	25	6.0	0.250	0.45	1000	**+**	40	500	0.27 0.35 0.47	10 100 500	50
CMLM7405	SOT-563	**Combination:** Low $V_{CE(SAT)}$ General Purpose PNP transistor and Low V_F Schottky diode	40	25	6.0	0.275	0.45	1000	**+**	40	500	0.27 0.35 0.47	10 100 500	50
CTLM1034-M832D	TLM832D	**Combination:** Low $V_{CE(SAT)}$ General Purpose NPN transistor and Low V_F Schottky diode	40	25	6.0	0.250	0.45	1000	**+**	40	1000	0.29 0.36 0.45 0.55	10 100 500 1000	–
CTLM1074-M832D	TLM832D	**Combination:** Low $V_{CE(SAT)}$ General Purpose PNP transistor and Low V_F Schottky diode	40	25	6.0	0.275	0.45	1000	**+**	40	1000	0.29 0.36 0.45 0.55	10 100 500 1000	–