

MC1000 Series (0 to +75°C)  
 MC1200 Series (-55 to +125°C)

The MECL II series of monolithic integrated logic circuits presents the system design engineer with an integrated circuit family designed to permit system implementation with the fewest possible number of individual units. This approach offers cost savings, reduced power supply requirements, smaller physical size and high reliability.

MECL II circuits feature the fastest propagation delay times with commensurate rise and fall times of any family of integrated circuits. This feature plus the constant current feature of MECL imposes fewer restrictions on design, layout and system fabrication than any other high-speed family.

### FEATURES

- Propagation typically 4 ns per logic decision
- Excellent noise immunity characteristics
- Simultaneous OR/NOR outputs
- High fan-in and fan-out capabilities
- Internally temperature compensated



**F SUFFIX  
 CERAMIC PACKAGE  
 CASE 607**



**L SUFFIX  
 CERAMIC PACKAGE  
 CASE 620**



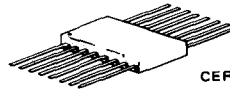
**L SUFFIX  
 CERAMIC PACKAGE  
 CASE 632  
 TO-116**



**P SUFFIX  
 PLASTIC PACKAGE  
 CASE 646**



**P SUFFIX  
 PLASTIC PACKAGE  
 CASE 648**



**F SUFFIX  
 CERAMIC PACKAGE  
 CASE 650**

### FUNCTIONS AND CHARACTERISTICS (V<sub>CC</sub> = 0, V<sub>EE</sub> = -5.2 V, T<sub>A</sub> = 25°C)

Function	Type ①		Loading Factor Each Output	Propagation Delay ns typ	Power Dissipation mW typ/pkg	Case
	-55 to +125°C	0 to +75°C				
Single 6-Input Gate, 3 OR Outputs w/Pulldowns 3 NOR Outputs w/Pulldowns	MC1201F,L	MC1001P	25	4.0	115	607,632,646
Dual 4-Input Gate, 2 OR Outputs w/Pulldowns 2 NOR Outputs w/Pulldowns	MC1204F,L	MC1004P	25	4.0	95	607,632,646
Dual 4-Input Gate, 2 OR Outputs w/o Pulldowns 2 NOR Outputs w/o Pulldowns	MC1206F,L	MC1006P	25	4.0	45	607,632,646
Triple 3-Input Gate, 3 NOR Outputs w/Pulldowns	MC1207F,L	MC1007P	25	4.0	110	607,632,646
Quad 2-Input Gate, 4 NOR Outputs w/Pulldowns	MC1210F,L	MC1010P	25	4.5	115	607,632,646
Quad 2-Input Gate, 2 NOR Outputs w/Pulldowns 2 NOR Outputs w/o Pulldowns	MC1211F,L	MC1011P	25	4.5	95	607,632,646

① Type numbers with F suffix use Case 607 or 650, Type numbers with L suffix use Case 632 or 620 as indicated. Type numbers with P suffix use Case 646 or 648 as indicated.