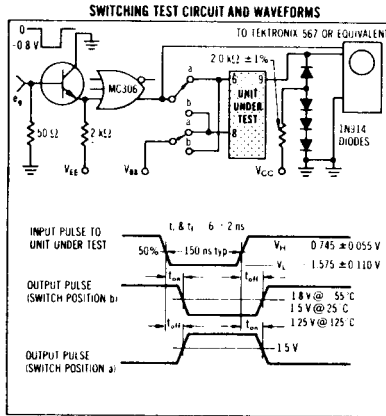
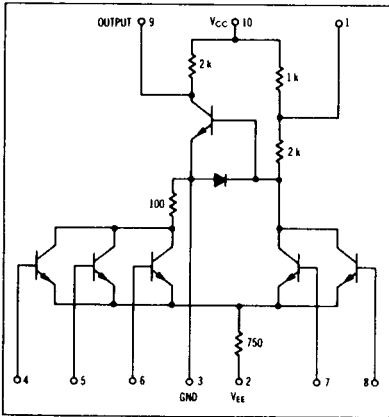


MECL-TO-SATURATED LOGIC
TRANSLATOR

MECL MC300 series

MC317

Level translator intended for converting non-saturated MECL signal levels to saturated logic levels; provides "OR" or "NOR" logic depending on the bias arrangement used.



ELECTRICAL CHARACTERISTICS

Characteristic	Test Conditions								Ground	Symbol Pin No in ()	Test Limits						Unit
	V _{dc} = 1%										-55°C		+25°C		+125°C		
	V _{in} Pin No	V _{in} max Pin No	V _{in} Pin No	V _{in} min Pin No	V _{in} Pin No	V _{cc} Pin No	I _b Pin No	mA dc			Min	Max	Min	Max	Min	Max	
Power Supply Inrush Current	—	6	—	2,4,5,7	6	10	—	3	I _c (10)	7.0	—	—	—	—	6.8	mA dc	
	—	—	—	2,4,5,6,7	6	10	—	3	I _c (2)	7.0	—	7.0	—	—	6.8	mA dc	
Input Current	4	—	—	2,4,5,7	6	10	—	3	I _i (4)	—	—	—	200	—	—	—	
	5	—	—	2,4,7	6	10	—	3	I _i (5)	—	—	—	—	—	—	—	
	6	—	—	2,4,5,7	6	10	—	3	I _i (6)	—	—	—	—	—	—	—	
	7	—	—	2,4,5,8	6	10	—	3	I _i (7)	—	—	—	—	—	—	—	
	8	—	—	2,4,5,7	6	10	—	3	I _i (8)	—	—	—	—	—	—	—	
Output Voltage, High	—	—	—	2,4,5,6,7	6	10	—	3	V _{OH} (8)	—	—	5.8	—	—	—	V dc	
	—	—	—	2,4,5,6,8	7	10	—	3	V _{OH} (8)	—	—	5.8	—	—	—	V dc	
Output Voltage, Low	—	4	—	2,4,5,7	6	10	9	3	V _{OL} (5)	—	0.45	—	0.45	—	0.50	V dc	
	—	5	—	2,4,7	6	10	9	3	V _{OL} (5)	—	—	—	—	—	—	—	
	—	6	—	2,4,5,7	6	10	9	3	V _{OL} (6)	—	—	—	—	—	—	—	
	—	6	—	2,4,5,8	7	10	9	3	V _{OL} (6)	—	—	—	—	—	—	—	
Switching Times	Pulse In		Pulse Out								Typ	Max	Typ	Max	Typ	Max	Unit
Turn-On Time	6	9	—	2,4,5,7	6	10	—	3	t _{on}	27.5	40.0	27.5	35.0	29.5	35.0	ns	
	6	9	—	2,4,5,7	6	10	—	3	t _{on}	27.5	40.0	27.5	35.0	29.5	35.0	ns	
Turn-Off Time	6	9	—	2,4,5,7	6	10	—	3	t _{off}	25.0	40.0	26.0	35.0	27.0	40.0	ns	
	6	9	—	2,4,5,7	6	10	—	3	t _{off}	25.0	40.0	26.0	35.0	27.0	40.0	ns	