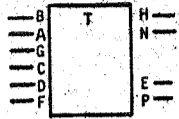


STANDARDS CODE

CARD CODE 729853

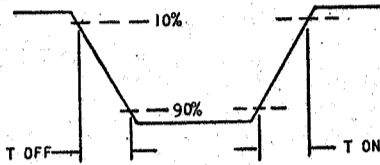
CW --

REFERENCE DRAWING  
SEE PRODUCTION DRAWING 371534



DELAY - USEC

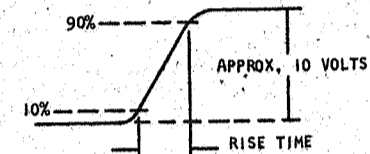
TYPICAL INVERTER AND EF OUTPUT WAVEFORM



INVERTER DELAY	MINIMUM	MAXIMUM
T OFF	0.15	0.8
T ON	0.10	0.3
EF DELAY	MINIMUM	MAXIMUM
T OFF	0.05	0.1
T ON	0.10	0.4

THE FOLLOWING DELAY INFORMATION APPLIES WHEN THE AC TRIGGERING INPUT PULSE HAS A RISE TIME OF 0.45 USEC. (SEE FOLLOWING FIGURE)

TRIGGERING PULSE

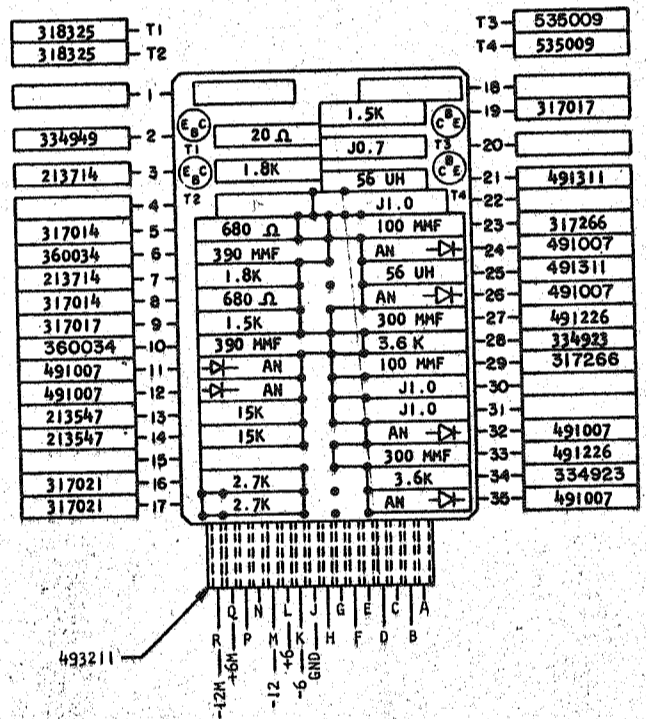
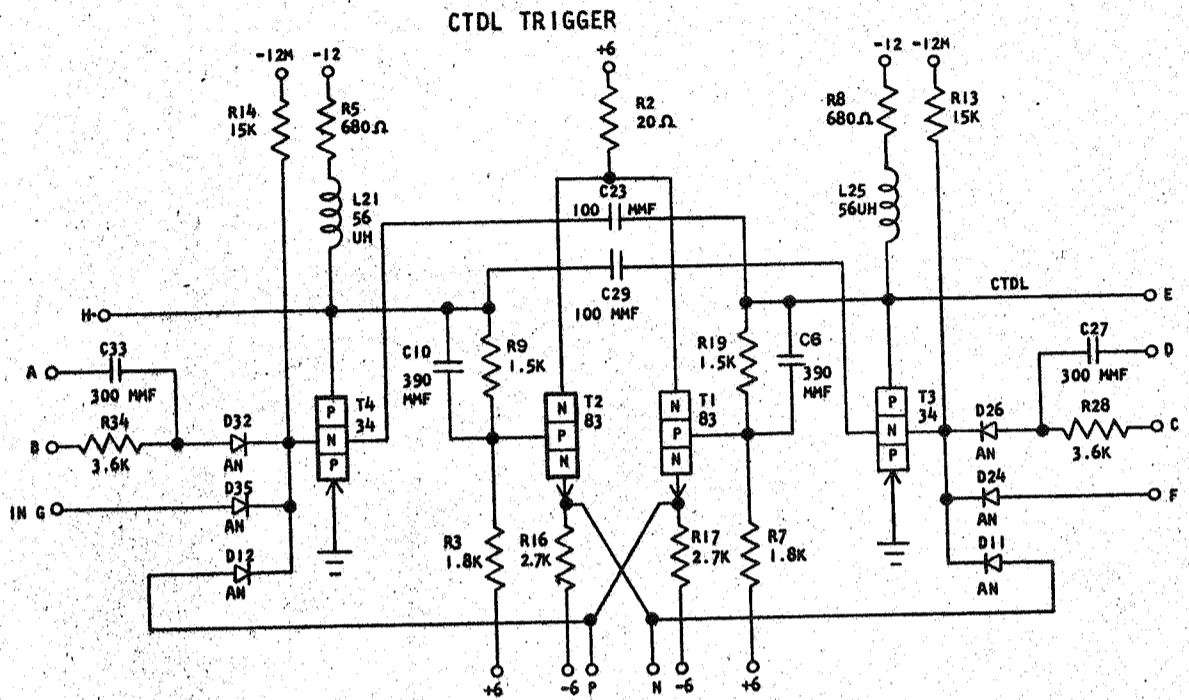


	MINIMUM	MAXIMUM
FROM AC SET TO INVERTER OUTPUTS	0.10	0.40
FROM AC SET TO EF OUTPUTS	0.10	0.30

SEQUENCE OF OPERATION

1. T4, T2 ON, T3, T1 OFF
2. GATE UP TO PIN B, AC SET TO PIN A T3, T1 ON T4, T2 OFF
3. GATE UP TO PIN C, AC SET TO PIN D T3, T1 OFF T4, T2 ON
4. GATE MUST BE UP 3.75 U SEC BEFORE AC SET
5. DC SET PIN G, T3, T1 ON T4, T2 OFF
6. COLLECTIVE PULLOVER MAY BE USED TO TURN T3 OR T4 ON
7. DC SET ON PIN F UP WHEN T1, T3 ARE ON WILL RESET TO CONDITION 1
8. DC SET OR RESET PULSE WIDTH: 0.5 USEC MINIMUM.

PINS	SIGNAL NAME	WAVE SHAPE	LEVELS	
			MIN	MAX
B	U GATE	[Waveform]	UP -0.54	0.24
			DOWN -7.44	-12.4
A, D	U AC SET	[Waveform]	UP -0.54	0.24
			DOWN -7.44	-12.4
G	T DC SET	[Waveform]	UP 1.44	6.24
			DOWN -0.74	-6.24
E	U OUTPUT	[Waveform]	UP 1.44	6.24
			DOWN -0.74	-6.24
N	T OUTPUT	[Waveform]	UP 1.44	6.24
			DOWN -0.74	-6.24
C	U GATE	[Waveform]	UP -0.54	0.24
			DOWN -7.44	-12.4
F	T DC SET	[Waveform]	UP 1.44	6.24
			DOWN -0.74	-6.24
P	T OUTPUT	[Waveform]	UP 1.44	6.24
			DOWN -0.74	-6.24
H	U OUTPUT	[Waveform]	UP -5.2	-0.8
			DOWN -7.4	-9.2



CIRCUIT AND PACKAGING STANDARD	
APPROVAL	DATE
ABC	4-2-62

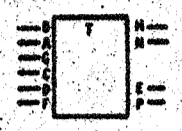
INTERNATIONAL BUSINESS MACHINES CORP.		DATE	CHANGE NO.	APPROVAL	DATE	CHANGE NO.	APPROVAL	DEVELOPMENT NO.
NAME CARD ASM TSIR-CTDL TRIGGER		62	115599					
DESIGN	MODEL	SMS						
DETAIL RQ	3-1-62	SCALE	NONE					
CHECK	WH	3-1-62	DRAW	LTG	3-17-62			
APPRO		CHECK						

729853

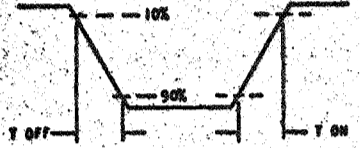
72953

72953  
CV --

**REFERENCE DRAWING**  
SEE PRODUCTION DRAWING 371534



**DELAY - USEC**  
TYPICAL INVERTER AND EF OUTPUT WAVEFORM

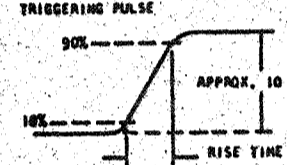


INVERTER DELAY		
	MINIMUM	MAXIMUM
T OFF	0.15	0.8
T ON	0.10	0.3

EF DELAY		
	MINIMUM	MAXIMUM
T OFF	0.05	0.1
T ON	0.10	0.4

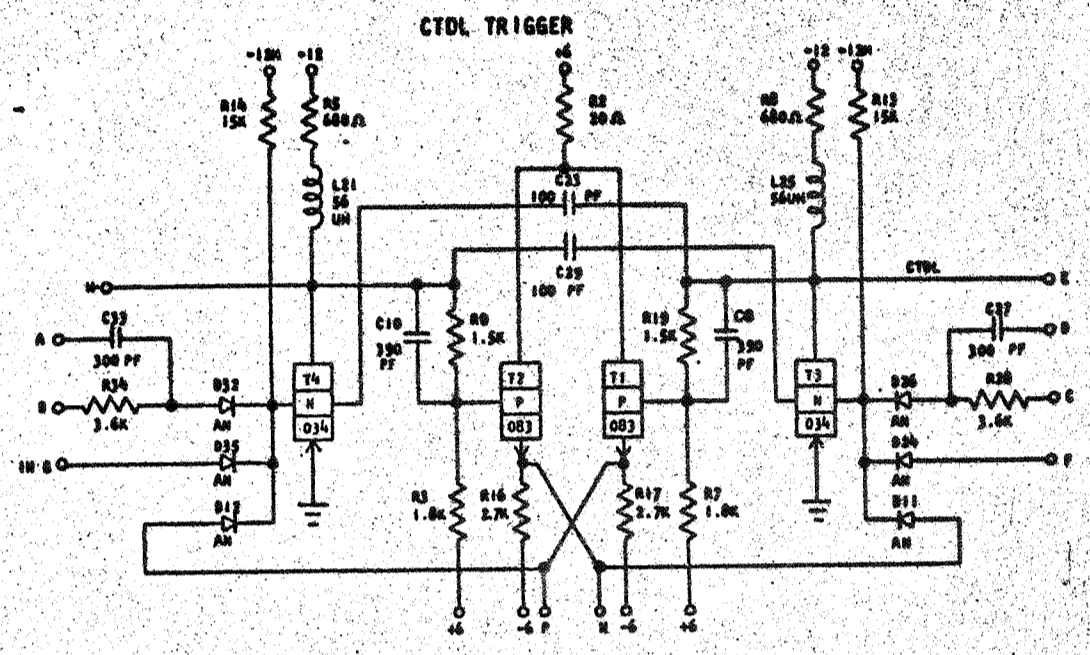
THE FOLLOWING DELAY INFORMATION APPLIES WHEN THE AC TRIGGERING INPUT PULSE HAS A RISE TIME OF 0.45 USEC. (SEE FOLLOWING FIGURE)



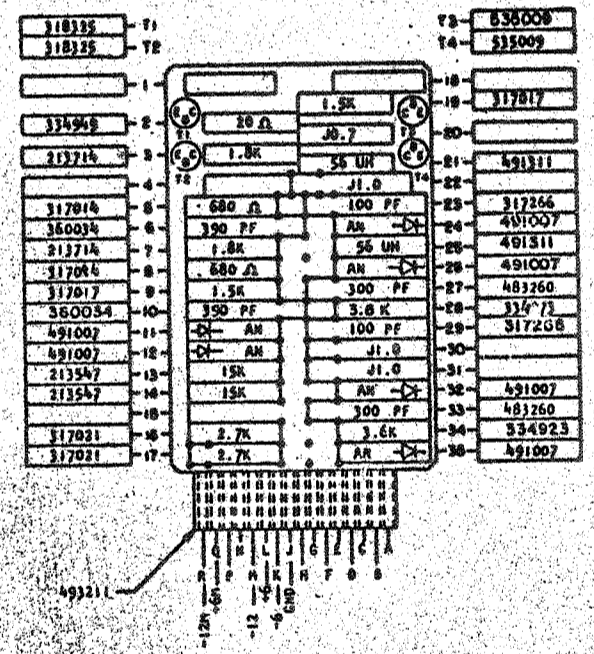
	MINIMUM	MAXIMUM
FROM AC SET TO INVERTER OUTPUTS	0.10	0.40
FROM AC SET TO EF OUTPUTS	0.10	0.30

**SEQUENCE OF OPERATION**

1. T4, T2 ON, T3, T1 OFF
2. GATE UP TO PIN B, AC SET TO PIN A T3, T1 ON T4, T2 OFF
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4. GATE MUST BE UP 3.75 USEC BEFORE AC SET
5. DC SET PIN G, T3, T1 ON T4, T2 OFF
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7. DC SET ON PIN F UP WHEN T1, T3 ARE ON WILL RESET TO CONDITION 1
8. DC SET OR RESET PULSE WIDTH: 0.5 USEC MINIMUM.



PINS	SIGNAL NAME	WAVE SHAPE	LEVELS	
			MIN	MAX
B	U	GATE	UP -0.54	0.24
A, B	U	AC SET	UP -0.54	0.24
G	T	DC SET	UP 1.44	6.24
E	U	OUTPUT	UP -5.2	-0.8
H	T	OUTPUT	UP 1.44	6.24
C	U	GATE	UP -0.54	0.24
F	T	DC SET	UP 1.44	6.24
P	U	OUTPUT	UP -5.2	-0.8
N	U	OUTPUT	UP -5.2	-0.8



CIRCUIT AND PACKAGING STANDARD	
APPROVAL	DATE
ABC	4-2-62

INTERNATIONAL BUSINESS MACHINES CORP.		DATE	CHANGE NO.	APPROVAL	DATE	CHANGE NO.	APPROVAL	DEVELOPMENT NO.
MAGNETIC CARD READ SYSTEM TRIGGER		4-2-62	145898					72953
REVISION		1-4-63	MC11666					
CHECKED BY		3-1-62	SCALE	NONE				
DRAWN		3-1-62	DRAWN	LTC	10-17-62			