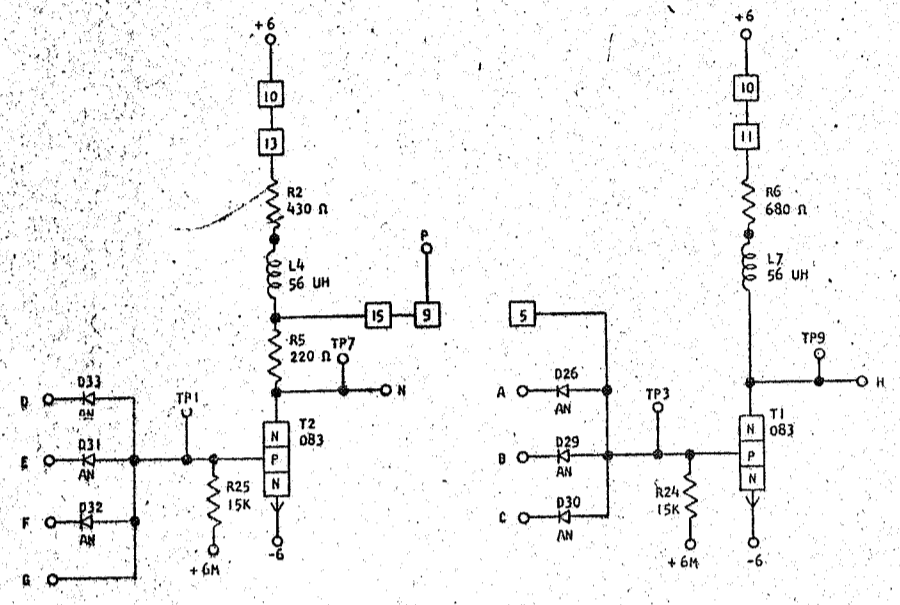
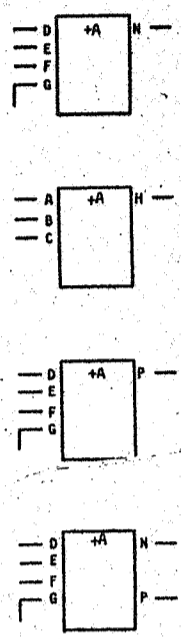


STANDARDS CODE  
729834

CARD CODE 729834  
CK WV

REFERENCE DRAWING  
SEE PRODUCTION DRAWING 371254

CTDL - 3 - WAY "AND" NPN



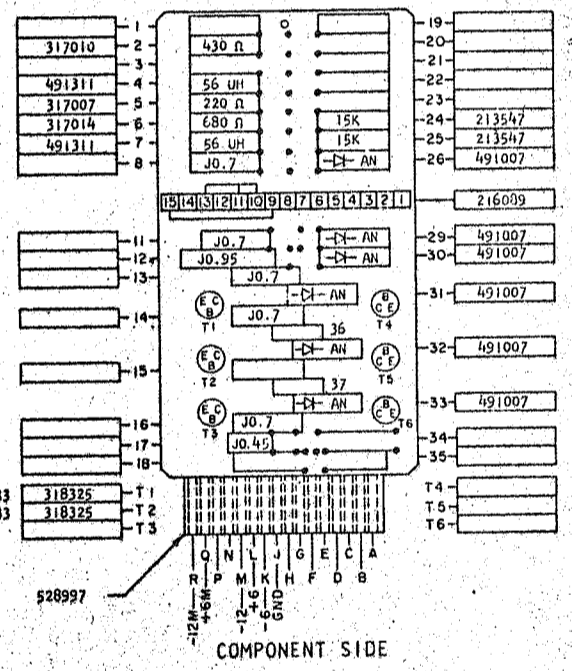
- SEQUENCE OF OPERATION
1. ALL INPUTS UP, TRANSISTOR ON OUTPUT DOWN
  2. ANY INPUT DOWN TRANSISTOR OFF OUTPUT UP
  3. THE INPUTS ON EXTENDER CARD MUST BE UP IN COINCIDENCE WITH INPUTS ON CARD FOR A DOWN OUTPUT
  4. LOGIC BLOCKS MAY HAVE SYMBOLS OTHER THAN SHOWN

PINS	SIGNAL NAME	WAVE SHAPE	LEVELS		
			MIN	MAX	
D, E, F, G	INPUT	[Waveform: High level]	UP	-5.3	0.2
A, B, C	INPUT	[Waveform: High level]	UP	-5.3	0.2
D, E, F, G	INPUT	[Waveform: High level]	UP	-5.3	0.2
N, H	OUTPUT	[Waveform: Low level]	DOWN	-7.4	-12.5
P, N	OUTPUT	[Waveform: Low level]	DOWN	-7.4	-12.5
P, N	OUTPUT	[Waveform: High level]	UP	1.4	6.2
P, N	OUTPUT	[Waveform: High level]	UP	2.82	6.24
G	EXTENDER INPUT	[Waveform: High level]	UP	+6.	
			DOWN	0.0	

DELAY - USEC

	MINIMUM	MAXIMUM
TURN ON	0.05	0.70
TURN OFF	0.05	1.50*

\*THIS DELAY CAN OCCUR ONLY ON HEAVILY LOADED BLOCKS.  
NOTE: THE ABOVE RANGES OF DELAYS ARE REPRESENTATIVE. SPECIFIC CIRCUIT APPLICATION AND/OR WIRING CAPACITANCE MAY RESULT IN DELAYS WHICH ARE OUT OF THE GIVEN RANGES. IN SUCH CASES, CARD REPLACEMENT SHOULD INDICATE IF THE CIRCUIT IS OUT OF SPECIFICATIONS.  
EXAMPLE: LOGIC BLOCK DRIVING EF "DR"



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 ASH TSTR-CTDL - 3 -	WAY "AND" NPN	1/25-62	115599					729834
DESIGN	BO	3-1-62	SCALE	NONE					
CHECK	MH	3-1-62	DRAW	LIG	3-17-62				
APPROD			CHECK						