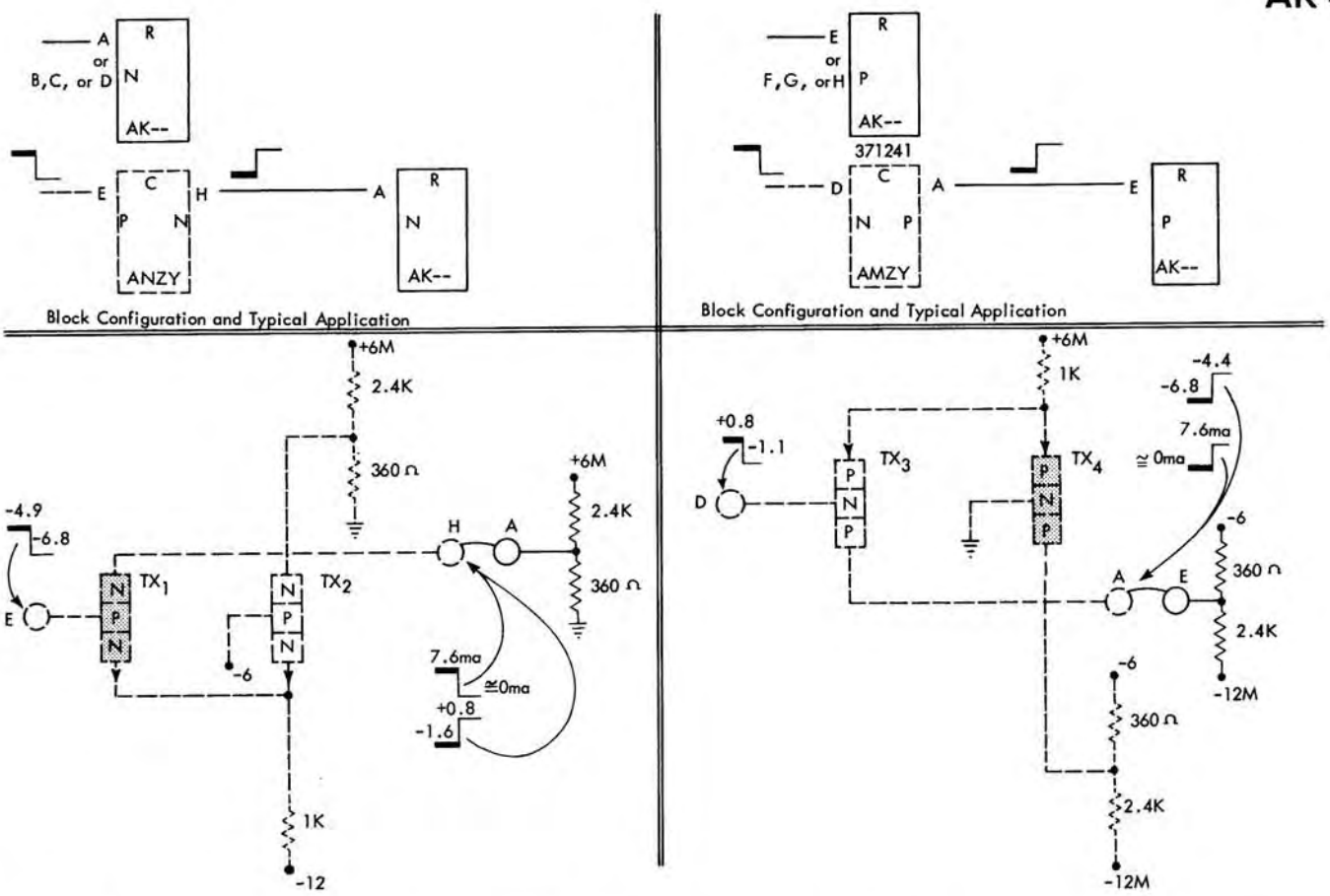

AK--, 371241

Current Input When Driven by			Max Load Back Current (I_{bo}'s) Allowed	N in Ø Output		N Out Ø Output		P In Ø Output		P Out Ø Output		Max. No of Bases Driven by Network (Pyramiding Factor)						
	In Ø	Out Ø		Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	No. of Inputs to Logic Block	3	6	9	12	15	30
Min.	4.82	5.31		+0.4 / -0.4	+1.2 / -2.5	+0.4 / -0.4	+1.2 / -3.0	-5.6 / -6.4	-3.5 / -7.2	-5.6 / -6.4	-3.0 / -7.2	In Ø	4	4	4	4	4	4
Nom.	6.0	7.6										Out Ø	5	4	3	2	1	-
Max.	7.3	10.2	.926 ma															

Current Mode N and P Block Coupling Network

This card provides eight networks; four to terminate N lines and four to terminate P lines. Their purpose is to provide an acceptable collector load for either an in-phase or an out-of-phase output which has no termination.

To understand why such networks are necessary, look at the typical application of an N line coupling network shown above left. Note that the out-of-phase output H of ANZY is tied to a coupling network. Such a connection is required when this output is not used to drive other circuits. The network is not located on the ANZY card because the out-of-phase output of this card provides a current output designed to drive into circuits requiring a current input. Examples of current input circuits are line drivers, line terminators and power drivers. The same reasoning applies to the ANZY card above, which has a P line coupling network tied to its output A.

Circuit Description

The N line coupling network provides a collector load for TX1. The load is necessary to accept the nominal 7.6ma of current flow through TX1 when the input is at −4.9v. Without this termination, the collector would be open circuited and the emitter-to-base diode would draw heavy input current and load down the driving circuit. The same reasoning applies to the P line coupling network; it acts as a suitable collector load for TX3.

The specification chart above also contains pyramiding factor information which describes the load that can be placed on this network when it is used as a voltage source.

Application

This card is used to terminate a circuit which has no termination.