



AG-- 371240

Current input when driven by	Output		Max Load Back Current ($I_{BO's}$) Allowed	N In \emptyset O'put		N Out \emptyset O'pt		P In \emptyset O'put		P Out \emptyset O'pt		Loading No of Bases Driven	
	In \emptyset	Out \emptyset		Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	In \emptyset	Out \emptyset
Min.	15.9	17.5	1.01 ma	+0.6	+1.2	+0.6	+1.2	-5.4	-4.5	-5.4	-3.0	4	4
Nom.	19.0	23.0		-0.6	-1.5	-0.6	-3.0	-6.6	-7.2	-6.6	-7.2		
Max.	23.7	32.1											

Current Mode Transmission Line Driver Coupling Network

The AG-- card has eight resistor networks used to terminate the current mode transmission line drivers and cable output to their proper reference voltage. These coupling networks are located at the load end of the cable. Four of the coupling loads, with outputs at pins A, B, C, and D, terminate NPN transmission line driver circuits that are loaded by N type logic blocks.

The four coupling networks with outputs at pins E, F, G, and H terminate PNP transmission line driver circuits that are loaded by P type logic blocks.

Circuit Description

The schematic above showing a P-type line driver is

terminated by a N-type coupling network. When the driver is on, about 19ma flows from the driver into the coupling network which results in a -N output. When the driver is off, current ceases to flow to the coupling network and a +N output is obtained from the driver.

Circuit operation is similar for a N type line driver terminated by a P type coupling load.

Application

These coupling networks are used to properly terminate both the in-phase and out-of-phase outputs of the line drivers.