



KA-- 371546

Input Levels	Delays (usec)	
	Min.	Max.
	Turn On	.17
	Turn Off	.18
		.80
		.29

High Current Indicator Driver

The high current indicator driver card (KA--) supplies 35 to 45ma to a 10v incandescent lamp (Sylvania 10 ESB). The circuit is a basic PNP inverter requiring a -P pulse duration of 12 milliseconds to produce a visual indication within the lamp. Four indicator drivers are located on each card.

Circuit Description

With a +T input at pin A, T4 is reverse-biased off. A pre-energization current of 10ma flows through the lamp, the 43 ohm and the 1K resistors to ground. This current, however, is not sufficient to give a visual indication in the lamp. The voltage output at pin E is near -10v.

When the input drops to -6v (-T level), T4 becomes forward-biased on and appears as a low resistance in parallel with the 1K resistor. The output at pin E increases to 0v and 35 to 45ma flows through the transistor to give a visual indication within the lamp.

Application

Twisted pair cables are used to connect the driver to the indicator panels. The voltage reference twists are grounded at the driver end and are commoned and decoupled to -6v at the indicator panel as shown above. This circuit is capable of driving an indicator located a maximum of 60 feet from the driver. Two indicator drivers may be driven from one CTDL block.