

Electronic Security System

SOLID STATE

AP 00231



PRODUCT

SS49 Analog Hall sensor

APPLICATION DESCRIPTION

They've developed a unique electronic security system for R.J. Reynolds Tobacco Co. that's designed to scare shoplifters, but not shoppers away from self-service cigarette displays.

Here's how it works. When one or two cartons of cigarettes are removed, the system emits a single beep. Most smokers buy in this quantity, so the computer based system doesn't warn store officials.

Shoplifters tend to grab several cartons before they dash out of the store. In fact, they have been known to grab a box of disposable diapers, remove the diapers, fill the box with cigarette cartons, and pay only for the diapers.

So, if three or more cartons are removed at the same time, or too many cartons in a certain time period, the system emits a stream of beeps. This signal is also sent to a remote beeper, which alerts management of the possible theft.

In addition, the system can be adjusted at night so that if any cartons are removed, or even touched, a multi-beep alarm system will sound. Research indicates this is especially important since theft by employees is a problem in many stores.

The key to this unique electronic security system is its ability to distinguish weight changes in merchandising racks. A Hall effect sensor from MICRO SWITCH is the backbone of the weight sensing unit. Its analog output voltage changes in relation to the rack's weight, working with the entire electronics package

to signal the microprocessor when cartons are removed. Then the beeps begin.