



| Card Code | Part Number | Input Levels | | Current Output (ma) | | |
|-----------|-------------|--------------|--------|---------------------|---------|------|
| | | Min | Max | | Nominal | Max. |
| HW-- | 371048 | -0.3 | +6.24 | On | 13 | 15 |
| | | -5.46 | -12.48 | Off | 5.5 | — |

Voltage Mode Indicator Driver

The HW-- card consists of four voltage mode indicator driver circuits. Each circuit supplies up to 15ma to an incandescent lamp connected to its out-of-phase output pin. A positive input level is required to turn on the transistor and light the lamp. The indicator drivers can be driven by CTDL, CTRL, or voltage trigger circuits that provide the input levels noted in the chart.

Circuit Description

With a -S input at pin F, the base voltage of T5 drops to -5.3v and holds the transistor reverse-biased off. Only a pre-energized current of 5.5ma flows through R23, R22,

and the lamp to the +12v supply; this current is not sufficient to light the lamp. A voltage output of 10.8v exists at pin C.

When the input increases to the +S level, the base of T5 increases towards +2.3v but clamps at +0.3v when T5 is forward-biased on. T5 appears as a low resistance in parallel with R23. The output at pin E increases toward ground potential and supplies 13ma to the lamp.

Application

Each circuit provides the current necessary to light one incandescent lamp. A typical logic application is shown.