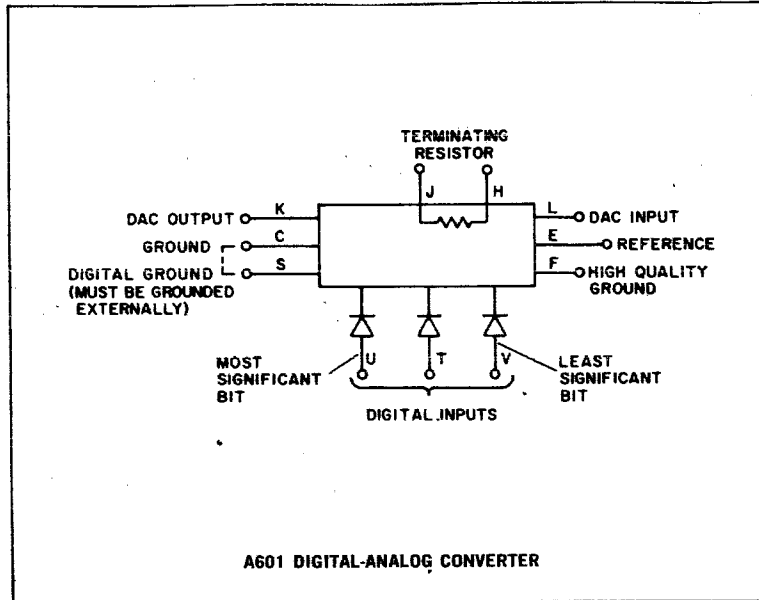


DIGITAL-ANALOG CONVERSION MODULE TYPE A601

A SERIES



The A601 is a three-bit digital-to-analog conversion module utilizing a star-type divider network and three precision germanium-transistor level amplifiers. It may be connected in series with other converters to form higher resolution converters. The accuracy of the A601 is suitable for up to eight bits of conversion. For higher resolution, it should be combined with the Types A604 and A605.

ACCURACY*: $\pm 0.25\%$ of expected value or ± 0.5 mv, whichever is greater

TEMPERATURE COEFFICIENT: ± 100 ppm/ $^{\circ}\text{C}$ max from $+10^{\circ}\text{C}$ to $+45^{\circ}\text{C}$

OUTPUT IMPEDANCE: 1000 ohms $\pm 0.1\%$

SWITCHING TIME: 300 nsec

SETTLING TIME: The settling time is determined by the capacitive loading at the output. Approximately 10 nsec/pf should be allowed in addition to the switching time.

DIGITAL INPUT: DEC standard levels. A -3v input signal at all digital inputs produces ground out. The input load is 1 ma at ground. If all inputs are not required, the most significant inputs should be used, and the least significant ones should be left open

circuited. **Converter Input**—The converter input may be driven from the converter output of another module in order to provide higher resolution. If not driven from another unit, it should be terminated with 1000 ohms to ground. A termination resistor is included in the module. **Reference Input**—The reference input requires a -15 ma DEC Type A702 or A704 Supply. The supply should be adjusted to approximately -10.01v to overcome the saturation resistance in the level amplifiers. **High Quality Ground**—This is the ground return for the reference supply and should be connected to the supply terminal and eventually to chassis ground at a noise-free location.

OUTPUT: The output is the analog equivalent of the digital input. The most positive output is 0v. The most negative output is -10v less the value of the least significant bit. The output impedance is 1000 ohms. If a bipolar or reduced output swing is required, the output may be loaded with 1000 ohms or more without affecting the accuracy.

POWER: $+10$ v/1 ma; -15 v/40 ma; -10 v ref/ -9 ma.

* At 25°C includes tolerance of ± 1.5 v on the $+10$ v and -15 v power supplies.

See **CAUTION** on A606 specifications.

A601 — \$60.00