

DIGITAL THERMOMETER

This is an addition to the digital thermometer article by Michael Ribgy that appeared in the February 1982 issue of **Radio-Electronics**. I have used this circuit on my MA1026 clock module to vary the brightness of the LED display automatically with changes in the room light. The circuit uses only three components, all of which are readi-

ly available, and I have had it in service for over a year.

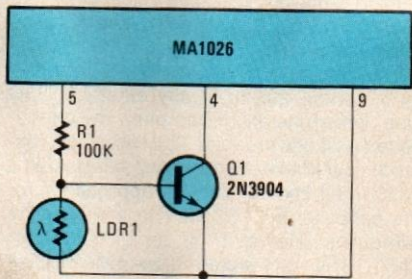


FIG. 1

Figure 1 tells the story. As the room light goes down, the resistance of LDR1 (Radio-Shack No. 276-116) increases. At a given point, determined by the value of R1, Q1 begins to conduct. That lowers the voltage on pin 4, and dims the display. Use any low-leakage transistor for Q1, with a gain (h_{fe}) of 100 or more. Select the value of R1 to get the desired dimming action, and remember that raising the value of R1 will slow the dimming action.

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