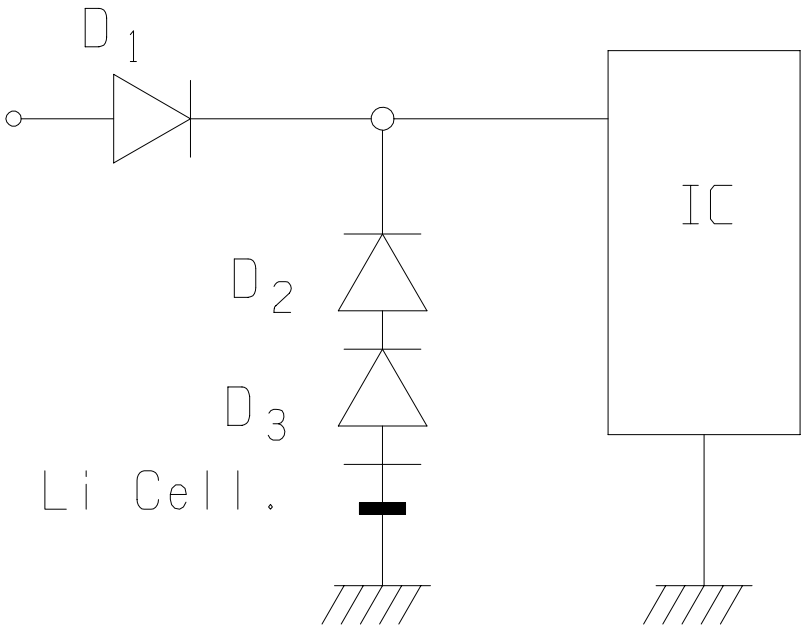
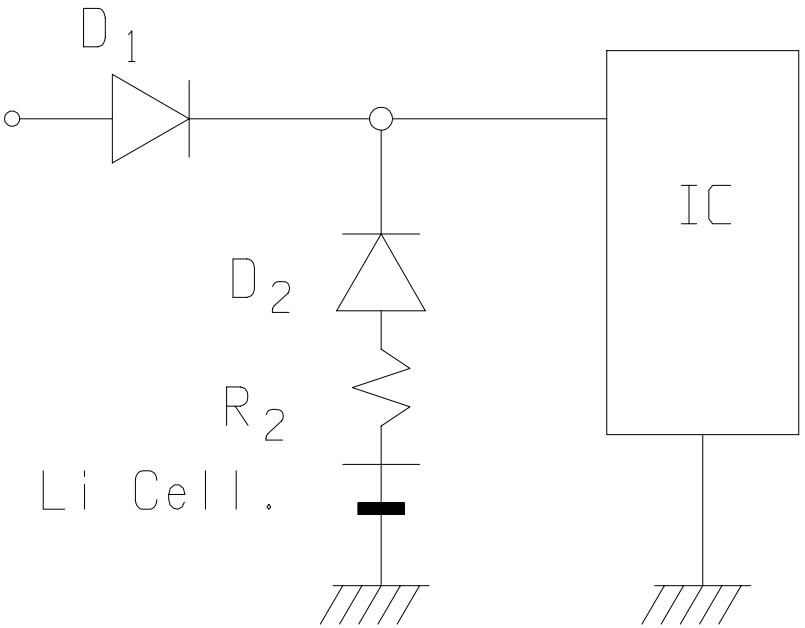


UL STANDARD(A)-PROTECTIVE DIODE

When incorporating a primary lithium battery into a memory back-up circuit, protective measures should be used to prevent the main power source from charging the battery. Diode D3 is added to the circuit in general. Its purpose is to maintain protection in case one of the diodes becomes damaged. Note that while the lithium battery is supplying current to the IC when the main power source is cut off, the voltage drops due to the 2 diodes increases.



UL STANDARD(B)-PROTECTIVE REISTOR

When incorporating a primary lithium battery into a memory back-up circuit, protective measures should be used to prevent the main power source from charging the battery. Resistor R3 is inserted to reduce the charging current to the battery in the event the diode is damaged and shorts. Note that when only the battery supplies current (when the main power source is off), a voltage drop develops across R2.

Tolerance (Inches)	Memory Protection Devices, Inc 200 Broad Hollow Road, Farmingdale, New York 11735		
Decimal ±.5 (.020)		Scale	Drawn By B.S. Approved By T.B.
Fractional ± .8 (.030)	Title PROTECTIVE DIODE AND RESISTOR		
Angular ± 3°	Date 03/20/01	Drawing Number	