Order this document by MC34164/D

MOTOROLA

MC34164
MC33164

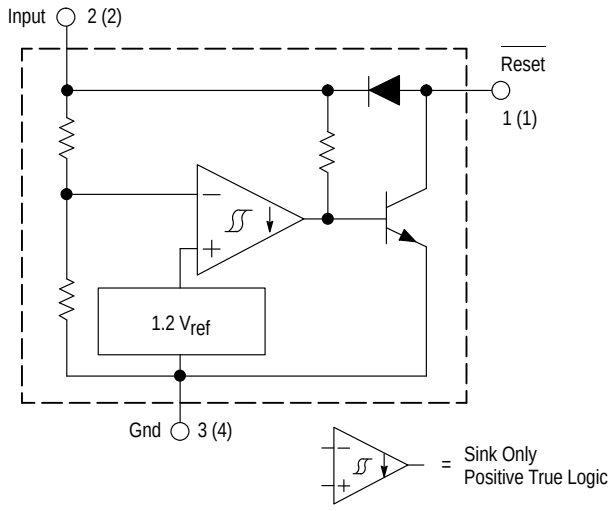
Micropower Undervoltage Sensing Circuits

The MC34164 series are undervoltage sensing circuits specifically designed for use as reset controllers in portable microprocessor based systems where extended battery life is required. These devices offer the designer an economical solution for low voltage detection with a single external resistor. The MC34164 series features a bandgap reference, a comparator with precise thresholds and built–in hysteresis to prevent erratic reset operation, an open collector reset output capable of sinking in excess of 6.0 mA, and guaranteed operation down to 1.0 V input with extremely low standby current. These devices are packaged in 3–pin TO–226AA, 8–pin SO–8 and Micro–8 surface mount packages.

Applications include direct monitoring of the 3.0 or 5.0 V MPU/logic power supply used in appliance, automotive, consumer, and industrial equipment.

- Temperature Compensated Reference
- Monitors 3.0 V (MC34164–3) or 5.0 V (MC34164–5) Power Supplies
- Precise Comparator Thresholds Guaranteed Over Temperature
- Comparator Hysteresis Prevents Erratic Reset
- Reset Output Capable of Sinking in Excess of 6.0 mA
- Internal Clamp Diode for Discharging Delay Capacitor
- Guaranteed Reset Operation With 1.0 V Input
- Extremely Low Standby Current: As Low as 9.0 μA
- Economical TO–226AA, SO–8 and Micro–8 Surface Mount Packages

Representative Block Diagram



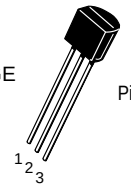
Pin numbers adjacent to terminals are for the 3–pin TO–226AA package.
Pin numbers in parenthesis are for the 8–lead packages.

This device contains 28 active transistors.

MICROPOWER UNDERVOLTAGE SENSING CIRCUITS

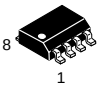
SEMICONDUCTOR TECHNICAL DATA

P SUFFIX
PLASTIC PACKAGE
CASE 29
(TO–226AA)

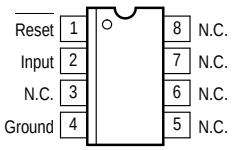


Pin 1. Reset
2. Input
3. Ground

D SUFFIX
PLASTIC PACKAGE
CASE 751
(SO–8)



DM SUFFIX
PLASTIC PACKAGE
CASE 846A
(Micro–8)



(Top View)

ORDERING INFORMATION

Device	Operating Temperature Range	Package
MC34164D–3	T_A = 0° to +70°C	SO–8
MC34164D–5		
MC34164DM–3		Micro–8
MC34164DM–5		
MC34164P–3		TO–226AA
MC34164P–5		
MC33164D–3	T_A = –40° to +125°C	SO–8
MC33164D–5		
MC33164DM–3		Micro–8
MC33164DM–5		
MC33164P–3		TO–226AA
MC33164P–5		