

## Product Overview

### MC33164: Voltage Supervisor, Micropower Undervoltage Sensing Circuit

For complete documentation, see the data sheet.

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. The NCV device is packaged in SO-8. Applications include direct monitoring of the 3.0 or 5.0 V MPU/logic power supply used in appliance, automotive, consumer, and industrial equipment.

### Features

- 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  $\mu$ A
- Economical TO-226AA, SO-8 and Micro-8 Surface Mount Packages

### Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Voltages Monitored	V <sub>OC</sub> Max (V)	V <sub>(TO)</sub> Typ (V)	I <sub>O</sub> Typ ( $\mu$ A)	Reset Active State	Reset Timer	Manual Reset	Watchdog Timer	Package Type
MC33164D-3G		Pb-free Halide free	Active	1	10	2.71	24	Low	No	No	No	SOIC-8
MC33164D-3R2G	0.4267	Pb-free Halide free	Active	1	10	2.71	24	Low	No	No	No	SOIC-8
MC33164D-5G		Pb-free Halide free	Active	1	10	4.33	32	Low	No	No	No	SOIC-8
MC33164D-5R2G	0.3048	Pb-free Halide free	Active	1	10	4.33	32	Low	No	No	No	SOIC-8
MC33164DM-3R2G		Pb-free Halide free	Active	1	10	2.71	24	Low	No	No	No	Micro8™
MC33164DM-5R2G		Pb-free Halide free	Active	1	10	4.33	32	Low	No	No	No	Micro8™
MC33164P-3G		Pb-free Halide free	Active	1	10	2.71	24	Low	No	No	No	TO-92
MC33164P-3RAG		Pb-free Halide free	Active	1	10	2.71	24	Low	No	No	No	TO-92
MC33164P-3RPG		Pb-free Halide free	Active	1	10	2.71	24	Low	No	No	No	TO-92
MC33164P-5G	0.2352	Pb-free Halide free	Active	1	10	4.33	32	Low	No	No	No	TO-92
MC33164P-5RAG		Pb-free Halide free	Active	1	10	4.33	32	Low	No	No	No	TO-92
MC33164P-5RPG		Pb-free Halide free	Active	1	10	4.33	32	Low	No	No	No	TO-92

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