



Standard Timer Single 0°C 70°C 8-Pin SOIC N

Manufacturer: Renesas Technology Corp

Package/Case: SOP-8

Product Type: Clock & Timer ICs

RoHS: RoHS Compliant/Lead free

Lifecycle: Active



Images are for reference only

Inquiry

General Description

The ICM7555 and ICM7556 are CMOS RC timers providing significantly improved performance over the standard SE/NE 555/556 and 355 timers, while at the same time being direct replacements for those devices in most applications. Improved parameters include low supply current, wide operating supply voltage range, low Threshold, Trigger and Reset currents, no crowbarring of the supply current during output transitions, higher frequency performance and no requirement to decouple Control Voltage for stable operation. Specifically, the ICM7555 and ICM7556 are stable controllers capable of producing accurate time delays or frequencies. The ICM7556 is a dual ICM7555, with the two timers operating independently of each other, sharing only V+ and GND. In the one shot mode, the pulse width of each circuit is precisely controlled by one external resistor and capacitor. For astable operation as an oscillator, the free running frequency and the duty cycle are both accurately controlled by two external resistors and one capacitor. Unlike the regular bipolar SE/NE 555/556 devices, the Control Voltage terminal need not be decoupled with a capacitor. The circuits are triggered and reset on falling (negative) waveforms, and the output inverter can source or sink currents large enough to drive TTL loads, or provide minimal offsets to drive CMOS loads.

Key Features

Exact equivalent in most cases for SE/NE 555/556 or TLC555/556

Low supply current

ICM7555: 60μA

ICM7556: 120μA

Extremely low input currents: 20pA

High-Speed operation: 1MHz

Guaranteed supply voltage range: 2V to 18V

Temperature stability: 0.005%/°C at +25°C

Normal reset function - no crowbarring of supply during output transition

Can be used with higher impedance timing elements than regular 555/556 for longer RC time constants

Timing from microseconds through hours

Operates in both astable and monostable modes

Adjustable duty cycle

High output source/sink driver can drive TTL/CMOS

Outputs have very low offsets, HIGH and LOW

Pb-free (RoHS Compliant)

Recommended For You

ICM7555CBA ICM7555CBAZ-T ICM7555IPAZ

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SOP-8 SOP DIP8

ICM7555IPA ICM7555IBAZ ICM7242IPA

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DIP8 SOP-8 DIP8

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