

CMOS Oscillator and Divider

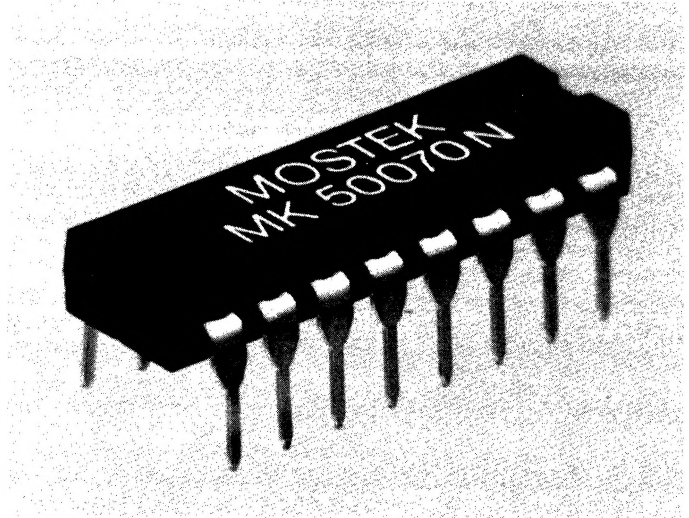
MOSTEK

FEATURES:

- Low Power Dissipation
- 4-18 Volt Operating Range
- Internal Zener Regulation
- Internal Oscillator

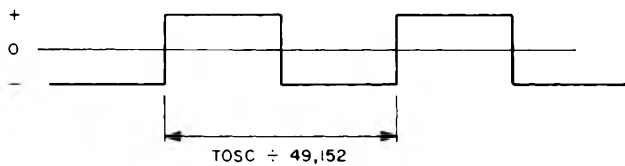
DESCRIPTION:

The MOSTEK 50070 circuit is an oscillator and divider circuit for specialized applications. An external quartz crystal determines the oscillator frequency and the chip divides this frequency by 49152. The output is buffered by a 4 transistor bridge.



MOTOR VOLTAGE WAVEFORM

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(PIN 6 RELATIVE TO PIN 8)

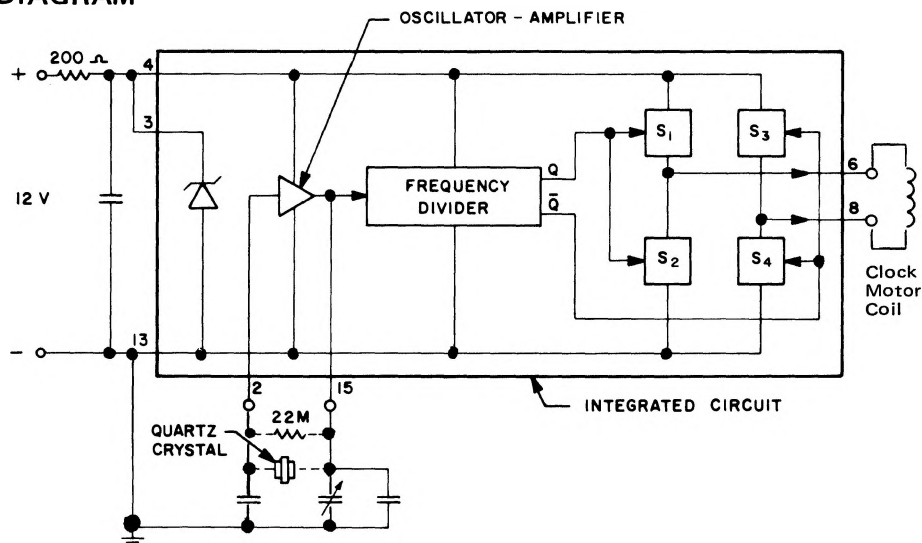


PIN CONNECTIONS

	1	16	
OSC IN	2	15	OSC OUT
ZENER	3	14	
V _{DD} (+)	4	13	V _{SS} (-)
	5	12	
OUTPUT 1	6	11	
	7	10	
OUTPUT 2	8	9	

Special
Products

FUNCTIONAL DIAGRAM



ABSOLUTE MAXIMUM RATINGS OVER FREE-AIR TEMPERATURE RANGE

Voltage on Any Pin Relative to V_{SS} +22V

Operating Free-Air Temperature Range..... 0°C to 70°C

Storage Temperature Range..... -40°C to +100°C

RECOMMENDED OPERATING CONDITIONS (0°C ≤ T_A ≤ 70°C)

PARAMETER	MIN	MAX	UNITS	NOTES
Operating Voltage with 200 Ω resistor	+4	+18	Volts	1
Maximum non-recurring Transient	-75	+110	Volts	2

ELECTRICAL CHARACTERISTICS (0°C ≤ T_A ≤ 70°C)

PARAMETER	MIN	MAX	UNITS	NOTES
Zener Voltage at $I_Z = 100 \mu A$	10	14	Volts	
Power Drain		30	mW	3
Total driver Voltage Drop S_1 and S_4 or S_2 and S_3		1	Volt	4
Maximum Frequency		3.145728	MHz	

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NOTES:

- 1. Pin 3 tied to Pin 4.
- 2. Time Constant Equals 45 milliseconds
- 3. With no load and $V_{DD} - V_{SS} = 10$ volts
- 4. $V_{DD} - V_{SS} = 4V, I_L = 2mA$

PACKAGE DESCRIPTION
16 pin plastic

