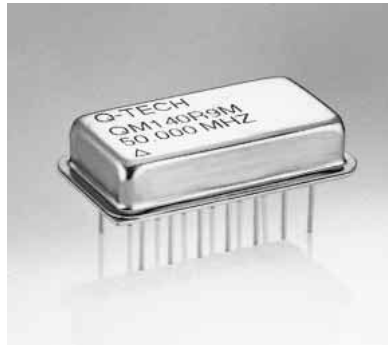


MICROPROCESSOR DRIVER

Whether a single phase clock or multiphase clock outputs with controlled skew, we have the solution.

Dual In-Line
Crystal
Oscillators



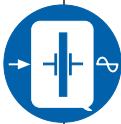
QM 140R

Q-TECH Corporation has developed a family of microprocessor clock drivers for various types of microprocessors ranging from 8 bit to the state of the art 32 bit and beyond. The QCM series product line covers the clock drivers for most of the 8 bit microprocessors. For full details please request bulletin MCD. The QM clock drivers are designed to match and surpass the most stringent requirements of the latest CICS as well as RISC type microprocessors.

Some of the common requirements of today's high performance microprocessors are:

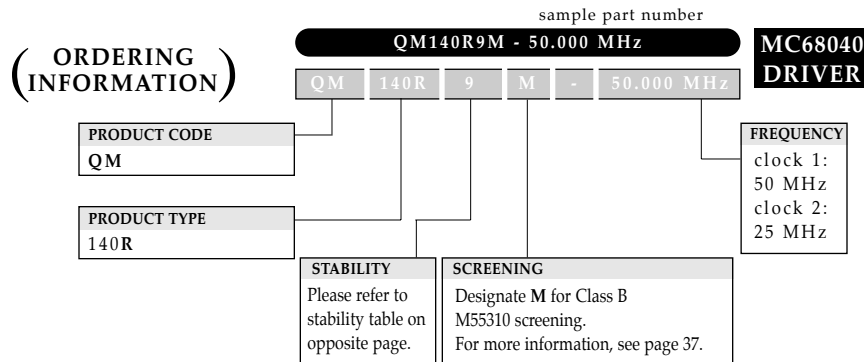
- Higher operating frequencies
- Fast rise and fall time
- Tight symmetry (duty cycle)
- Capacitive load drive capability

Please contact us for variations on these specifications

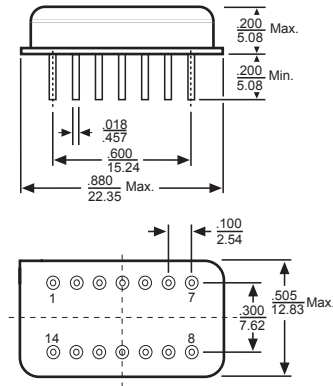


Q-Tech Corporation

(310) 836-7900
fax (310) 836-2157



Upper dimensions in inches - lower dimensions in millimeters. Unless otherwise specified, tolerances are .005" (.127mm.). Detailed mechanical drawings available by request.



QM140R

PIN CONFIGURATIONS

QM#	PIN #	SIGNAL
QM140	14	VCC
	7	GND
	4	PCLK (clock 1)
	8	BCLK (clock 2)

FEATURES

- Guaranteed parameters over extreme temperature and voltage range.
- Multiple outputs with guaranteed timing when required.
- Automatic testing capability (optional).
- Class B M55310 Screening (optional).

FREQUENCY STABILITY vs TEMPERATURE*

CODE	±%	±PPM	TEMP
1	.01	100	0°C to +70°C
4	.005	50	0°C to +70°C
9	.005	50	-55°C to +125°C
10	.01	100	-55°C to +125°C
11	.005	50	-40°C to +85°C
12	.01	100	-40°C to +85°C

*All units operate from -55°C to +125°C. Tolerance is not specified outside the temperature ranges shown above.

QM140R Clock module meets the requirements of Motorola MC68040. The clock generator provides both PCLK and BCLK (as defined per MC68040 designers handbook and the following diagram) with the following specifications:

ELECTRICAL

SPECIFICATIONS

Output Frequency:	clock 1- up to 60 MHz clock 2- half of clock 1
Supply Voltage:	5V ±10% min.
Supply Current:	65 mA max.
Output Symmetry (duty cycle):	47.5/52.5% @ 1.5V
Rise/fall time (0.8V to 2.0V):	clock 1- 1.6 ns clock 2- 3.0 ns
Output Logic Level:	"1" 3.0V min. "0" 0.3V max.
Load capacitance:	PCLK 60 pF max. *** BCLK 120 pF min. ***
Package:	14 pin DIP
Output Clock Skew (ts):	± 6.5 nsec

*** For more information see technical information sheet. The above specification covers the clock requirements of the Motorola 68040 as well as 68030 (single input).

Other standard microprocessor Hybrid drivers are available. Please request our bulletin on this product line.

