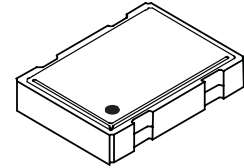




SM7745H CMOS Series



- CMOS with Enable/ Disable or Optional Stand By Mode (3.3 V)
- Fundamental or 3rd Overtone Crystal Used
- 4 Pad 7 x 5mm Leadless Surface Mount Ceramic Clock Oscillator

1.500 MHz – 69.999 MHz

Standard Specifications

Overall Frequency Stability	SM7745H: ± 50 PPM, SM7744H: ± 25 PPM, SM7720H: ± 20 PPM over Operating Temp. Range
Operating Temperature Range	0 to +70°C is standard, but can be extended to -40 to +85°C for certain frequencies
Supply Voltage (Vcc)	5.0 volts, 3.3 volts and 2.5 volts available, .01 μ F bypass cap recommended
Symmetry (Duty Cycle)	40/60 to 60/40% is standard, but 45/55% at 50% of Vcc is also available (see Waveform 1)
Logic Levels	Logic "1" 90% of Vcc MIN; Logic "0" 10% of Vcc MAX
Output Load	Standard load is 15 pF (typ. 1 ASIC) maximum, see Test Circuit 2 (consult factory for heavier loads)
Enable/Disable Option (E/D)	Output enabled when Pin #1 is open or at Logic "1"; Output disabled when Pin #1 is at Logic "0".

Frequency Range (MHz)	Max. Supply Current Icc (mA) w/ 15pF load		Max. Rise and Fall Time Tr & Tf (nS) w/ 15pF load
	2.5V, 3.3V	5.0V	2.5V to 5.0V
1.500 – 10.999	7	10	5.0
11.000 – 23.999	15	15	5.0
24.000 – 29.999	15	20	5.0
30.000 – 45.999	20	30	5.0
46.000 – 69.999	25	45	4.5

CMOS < 80 MHz
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Part Numbering Guide

Portions of the part number that appear after the frequency may not be marked on part (C of C provided)

SM77 45 H V - 50.0M - SB - 30 - XXX (Internal Code or blank)

Packaging
Tray or
16mm tape
8mm pitch

Model

Frequency Stability

45 = ± 50 PPM
44 = ± 25 PPM
20 = ± 20 PPM

Frequency in MHz

Special Specifications (choose all that apply)

Y: Std Specs (5.0V $\pm 10\%$, 0 to +70°C, 40/60% Symmetry)
E: Extended Operating Temperature Range (-40 to +85°C)
S: 45/55% Symmetry at 50% of Vcc
V: Supply Voltage of 3.3 volts $\pm 10\%$
W: Supply Voltage of 2.5 volts $\pm 5\%$

Non-Std Output Load Blank = 15 pF max, 30 = 30 pF max

Optional Stand By Mode (3.3 volt only)

Consult factory for available frequencies and specs. Not all options available for all frequencies. A special part number may be assigned.

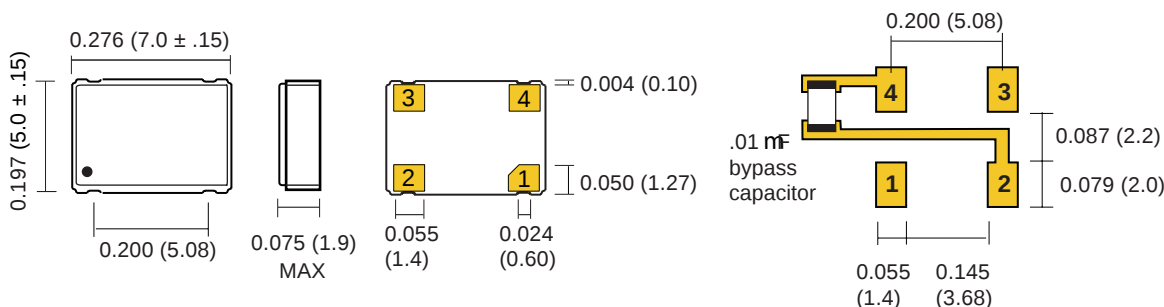
Frequency Stability is inclusive of frequency shifts due to calibration, temperature, supply voltage, shock, vibration and load

Mechanical: inches (mm)

not to scale

Solder Pads

Due to part size and factory abilities, part marking may vary from lot to lot and may contain our part number or an internal code.



Lead Free

Aug 2005