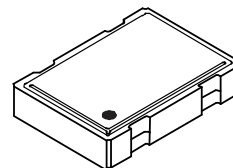




# Pletronics, Inc.

19013 36th Ave. W, Suite H • Lynnwood, WA 98036 USA  
Manufacturer of High Quality Frequency Control Products

## SM7745H CMOS Series



- CMOS with Enable/ Disable or Optional Stand By Mode
- 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

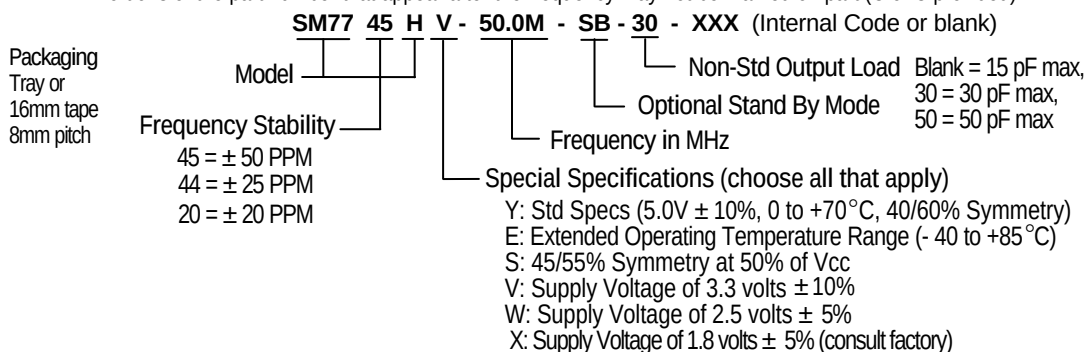
|                             |                                                                                                      |
|-----------------------------|------------------------------------------------------------------------------------------------------|
| Overall Frequency Stability | SM7745H: $\pm 50$ PPM, SM7744H: $\pm 25$ PPM, SM7720H: $\pm 20$ 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, 2.5 volts and 1.8 volts available, .01 $\mu$ 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<br>(MHz) | Max. Supply Current<br>Icc (mA) w/ 15pF load |      | Max. Rise and Fall Time<br>Tr & Tf (nS) w/ 15pF load |  | Frequency<br>Range (MHz) | Max. Icc (mA)<br>w/ 15pF load | Max. Tr & Tf (nS)<br>w/ 15pF load |
|--------------------------|----------------------------------------------|------|------------------------------------------------------|--|--------------------------|-------------------------------|-----------------------------------|
|                          | 2.5V, 3.3V                                   | 5.0V | 2.5V to 5.0V                                         |  |                          |                               |                                   |
| 1.500 – 10.999           | 7                                            | 10   | 5.0                                                  |  |                          | 1.8V                          | 1.8V                              |
| 11.000 – 23.999          | 15                                           | 15   | 5.0                                                  |  | 1.500 – 39.999           | 10                            | 5.0                               |
| 24.000 – 29.999          | 15                                           | 20   | 5.0                                                  |  | 40.000 – 69.999          | 25                            | 3.0                               |
| 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)



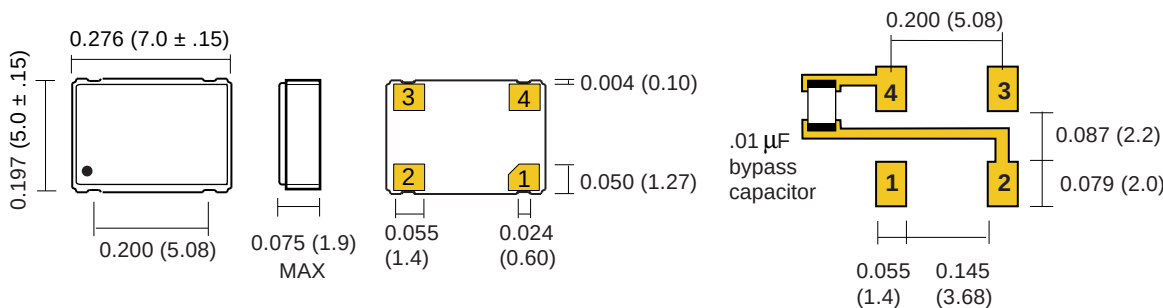
Consult factory for available frequencies and specs. Not all options available for all frequencies. A special part number may be assigned.  
Frequency Stability is inclusive of frequency shifts due to calibration, temperature, supply voltage, shock, vibration and load

### 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.



| PIN | SIGNAL    |
|-----|-----------|
| 1   | E/D or SB |
| 2   | GND       |
| 3   | OUT       |
| 4   | Vcc       |



Mar 2004