

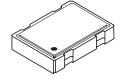
Pletronics, Inc.

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

SM7745D CMOS Series

- CMOS with Enable/ Disable, 3rd Overtone Crystal Used
- 4 Pad 7 x 5mm Leadless Surface Mount Ceramic Clock Oscillator
- Low Jitter

Logic Levels



70.00 MHz - 170.00 MHz Consult factory for higher frequencies

Standard Specifications

Overall Frequency Stability Operating Temperature Range

Supply Voltage (Vcc) Symmetry (Duty Cycle)

Jitter Output Load Enable/Disable Option (E/D) SM7745D: ±50 PPM, SM7744D: ±25 PPM, SM7720D: ±20 PPM over Operating Temp. Range

0 to +70°C is standard, but can be extended to -40 to +85°C for certain frequencies

5.0, 3.3, and 2.5 volts available, .01 µF bypass cap recommended, consult factory for 1.8 volts 40/60 to 60/40% is standard, but 45/55% at 50% of Vcc is also available (see Waveform 1)

Logic "1" 90% of Vcc MIN; Logic "0" 10% of Vcc MAX 1 pS RMS maximum, from 12 kHz to 20 MHz from carrier

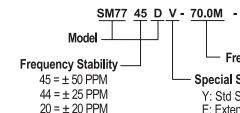
Standard load is 15 pF (typ. 1 ASIC) maximum, see Test Circuit 2 (consult factory for heavier loads) Output enabled when Pin #1 is open or at Logic "1"; Output disabled when Pin #1 is at Logic "0".

Frequency Range (MHz)	Max. Supply Current lcc (mA) w/ 15pF load		Max. Rise and Fall Time Tr & Tf (nS) w/ 15pF load	
	2.5V, 3.3V	5.0V	2.5V	3.3V, 5.0V
70.000 - 79.999	30	45	3.5	3.0
80.000 - 110.000	40	80	2.5	1.5
110.001 - 119.999	50	90	2.5	1.0
120.000 - 170.000	60	95	1.5	1.0

Part Numbering Guide

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





30 - XXX (Internal Code or blank)

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

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 ± 10%

W: Supply Voltage of 2.5 volts ± 5%

X: Supply Voltage of 1.8 volts $\pm 5\%$ (Consult factory)

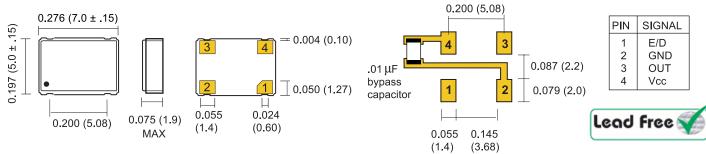
Consult factory for available frequencies and specs. Not all options available for all frequencies. A special part number may be assigned. Frequency Stability is inclusive of frequency shifts due to calibration, temperature, supply voltage, shock, vibration and load

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.



Mar 2004