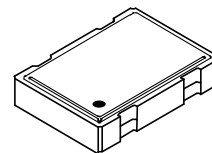


SM7745D CMOS Series



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

70.00 MHz – 170.00 MHz

Consult factory for higher frequencies

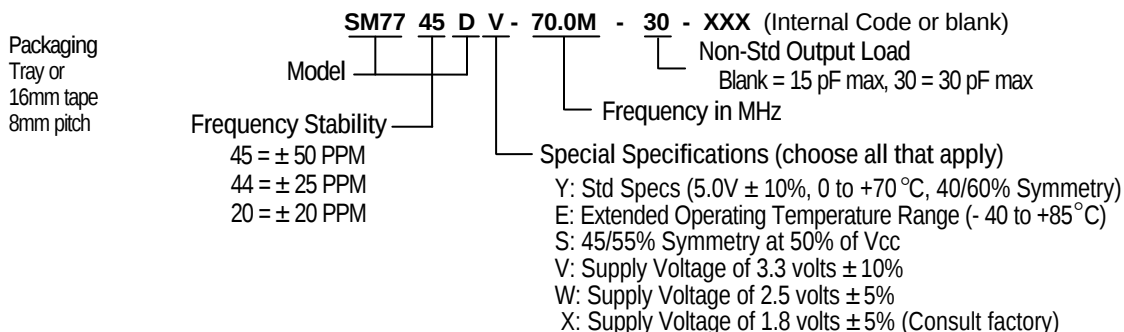
Standard Specifications

Overall Frequency Stability	SM7745D: ± 50 PPM, SM7744D: ± 25 PPM, SM7720D: ± 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, 3.3, and 2.5 volts available, .01 μ F bypass cap recommended, consult factory for 1.8 volts
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
Jitter	1 pS RMS maximum, from 12 kHz to 20 MHz from carrier
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 I _{cc} (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)



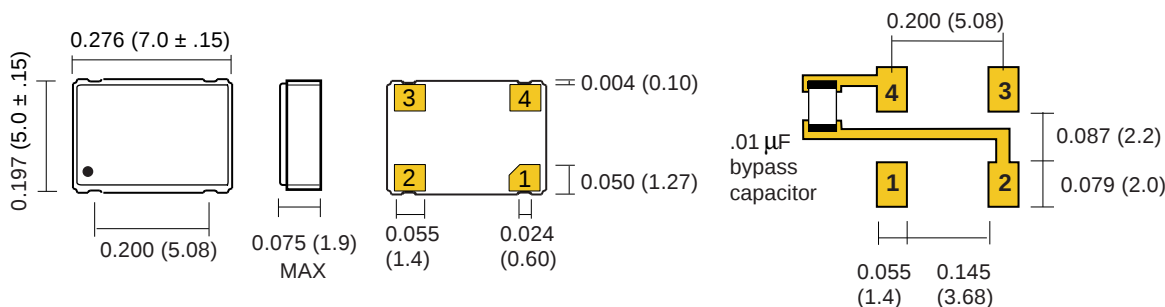
Consult factory for available frequencies and specs. Not all options available for all frequencies. A special part number may be assigned.
Frequency Stability is inclusive of frequency shifts due to calibration, temperature, supply voltage, shock, vibration and load

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
2	GND
3	OUT
4	Vcc

Lead free 

Mar 2004