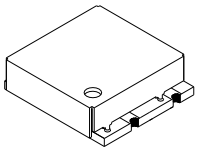
Pletronics, Inc.
19013 36th Ave. W, Suite H • Lynnwood, WA 98036 USA
Manufacturer of High Quality Frequency Control Products

SM7645H CMOS Series



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

1.500 MHz – 69.999 MHz

Standard Specifications

Overall Frequency Stability	SM7645H: ±50 PPM, SM7644H: ±25 PPM, SM7620H: ±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 µF 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

Frequency Range (MHz)	Max. Icc (mA) w/ 15pF load	Max. Tr & Tf (nS) w/ 15pF load
	1.8V	1.8V
1.500 – 39.999	10	5.0
40.000 – 69.999	25	3.0

Part Numbering Guide

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

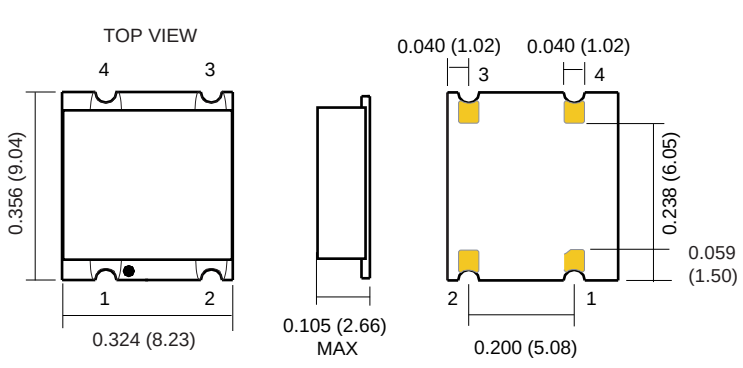
SM76 45 H V - 50.0M - SB - 30 - XXX (Internal Code or blank)

- Packaging: Tray or 24mm tape 16mm pitch
- Model
- Frequency Stability: 45 = ±50 PPM; 44 = ±25 PPM; 20 = ±20 PPM
- Special Specifications (choose all that apply):
  - Y: Std Specs (5.0V ± 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 ± 5% (consult factory)
- Frequency in MHz
- Optional Stand By Mode (3.3 volt only)
- Non-Std Output Load: Blank = 15 pF max, 30 = 30 pF max

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

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