Surface Mount Crystal Oscillators
Ultra Low Standby Current

SERIES CO43S and CO46S

Features

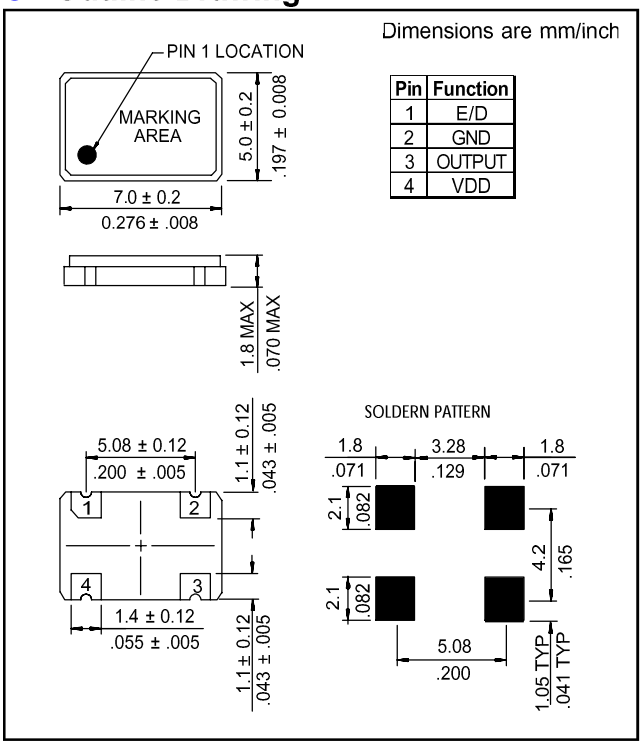
- Small profile of 5 x 7 x 1.8 mm
- Extremely low power consumption
- Standby function

Specifications

Parameter			CO43S		CO46S	
Frequency Range			1.00 to 33.00 MHz	33.01 to 50.00 MHz	50.01 to 70.00 MHz	70.01 to 156.250 MHz
Overall Frequency Stability (See table)			±25 PPM, ±32 PPM, ±50 PPM, ±100 PPM			
Temperature Range	Standard		-20°C to +70°C			
	Extended		-40°C to +85°C			
	Storage		-50°C to +125°C			
Input	Voltage		+3.3V			
	Current		12mA	25mA	35mA	60mA
Output	Symmetry		Normal: 40% to 60% and Tight 45% to 55%			
	Standby		10µA Maximum			
	Voltage	Logic "0" Level	10% Vdd Maximum			
		Logic "1" Level	90% Vdd Minimum			
	Load		15pF to 50pF	15pF to 30pF		15pF
Rise/Fall Time			4.0ns Maximum	3.0ns Maximum	2.5ns Maximum	2.0ns Maximum
Enable/Disable Function			"1" High or Open: Oscillation with +2.2V Minimum			
			"0" Low: No Oscillation (High Z) with +0.8V Minimum			
Start Up Time			10 ms Maximum			
Shock			100 g, 0.35 ms, 1/2 Sinewave with 3 shocks in 3 axes			

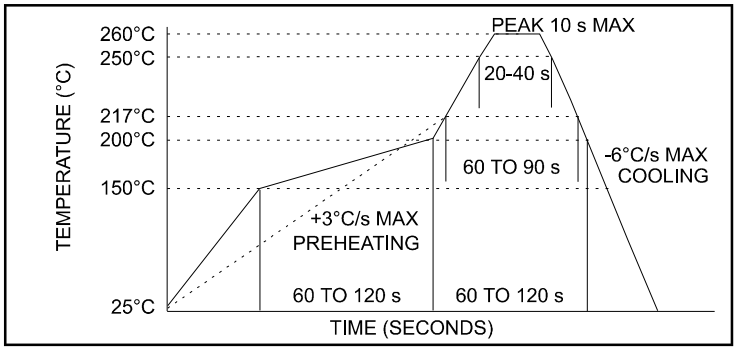
Overall stability options				
	Commercial Temp. Range	Industrial Temp. Range	Aging, in years	±10% Supply ±5%Load variation
±25 PPM	x		5	x
±32 PPM	x		10	x
±50 PPM	x	x	10 w/ commercial temp. 5 w/ industrial temp.	x
±100 PPM	x	x	10	x

Outline Drawing

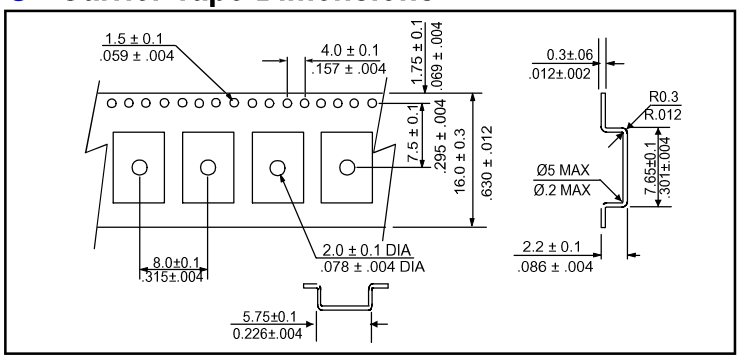


Pin	Function
1	E/D
2	GND
3	OUTPUT
4	VDD

Reflow Solder Profile



Carrier Tape Dimensions



Part Numbering System

Series		Frequency Stability		Standby Suffix		Frequency		Extended Temperature			Symmetry			Output Load			Tape and Reel
CO43	-	025	±25 PPM	S	-	In MHz	-	EXT	-40°C to +85°C	-	T	Tight 45% to 55%	-	L30	30 pF	-	TR
		032	±32 PPM											L50	50 pF		
		05	±50 PPM														
		10	±100 PPM														

Example: CO4310S-32.000-T-TR

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