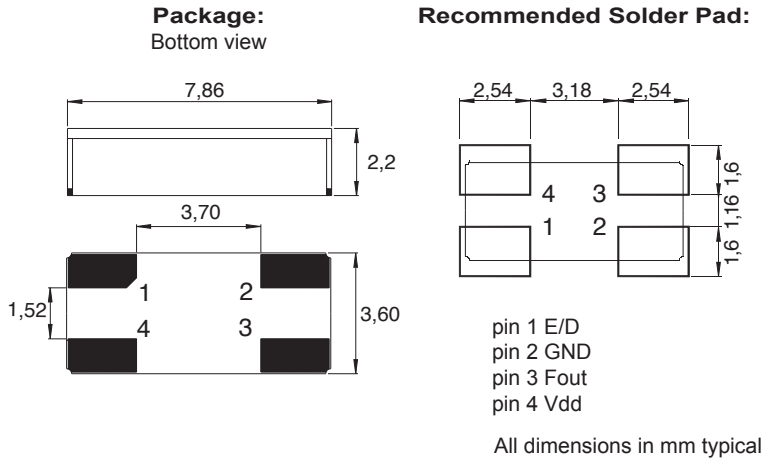




DIMENSIONS



SC cut quartz crystal
SMT Clock oscillator in ceramic package
Fundamental quartz mode frequency
Ultra low stability
High shock and vibration resistance
Wide temperature range
Low aging
Ultra low internal MSL
Very fast start-up
Excellent solderability
Swiss made quality
Customer specification on request

Frequency stability
included 1000h at Tmax

ELECTRICAL CHARACTERISTICS AT +25°C

DESCRIPTION:

This SMD oscillator in ceramic package has been specially designed for surface mount using infrared, vapor phase or epoxy techniques.

APPLICATIONS:

- Avionics
- Airbone equipments
- Fire fighter equipments

The MCSO1's are supplied on trays (91 pcs / tray)
For pick-and-place equipment, the parts are available in 16mm tapes with 250 parts min
1000 parts max

Frequency stability Over temperature range R = -10 to +150°C (see ordering info) Including 2)*	$\Delta F/F$	$\leq \pm 50$	ppm
Frequency stability Over temperature range S = -10 to +175°C (see ordering info) Including 2)*	$\Delta F/F$	$\leq \pm 100$	ppm
Frequency stability Over temperature range T = -10 to +210°C (see ordering info) Including 2)*	$\Delta F/F$	$\leq \pm 150$	ppm
Supply voltage $\pm 5\%$ 1)*	Vdd	2.5 / 3.3 / 5	V
Input current	Idd	see table 1	
Output signal		HC-MOS compatible	
Symmetry at Vdd/2		40 / 60	%
Rise & fall time $\leq 30\text{MHz}$ For F=32.768 kHz rise & fall time $\leq 150\text{ns}$ (load 15pf 20% to 80%)		≤ 7	ns
Rise & fall time $\geq 30\text{MHz}$ for (load 15pf 10% to 90%)		≤ 3	ns
Level "0" & "1"		$<0.4>V_{dd}-0.5$	V
Start-up time	t	<5	ms
Load min / max		3/47	pF

* 1) C = 47nF ceramic must be connected between GND & Vdd
Operable over 2.3 to 5.5V

* 2) adjustment at +25°C, long term aging 1000h at Tmax ordered
over supply voltage $\pm 5\%$ and over load min to max

