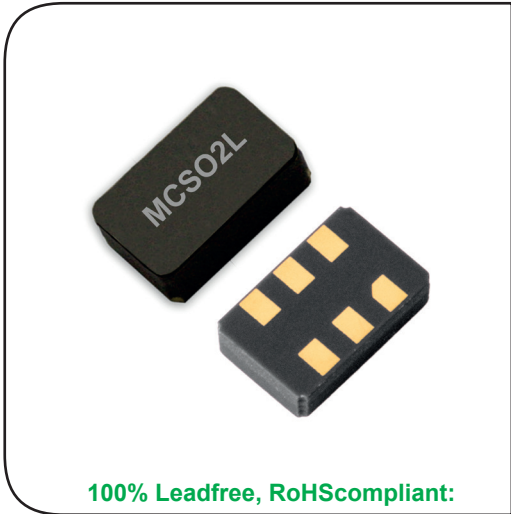
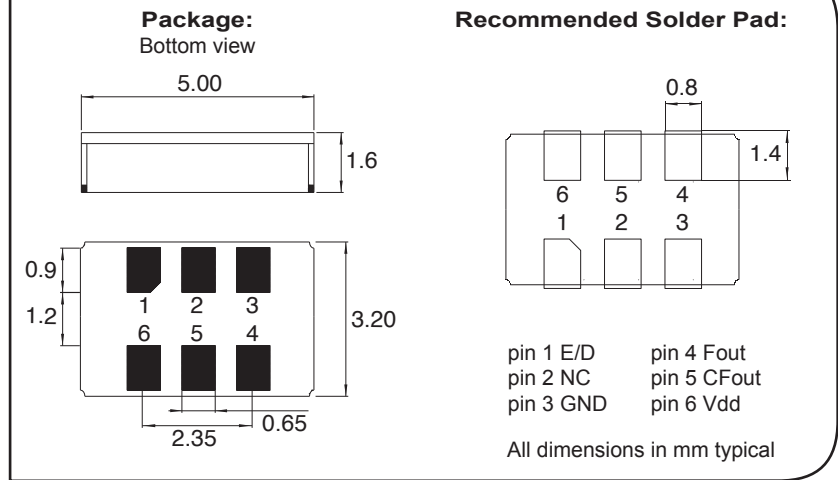


# MCSO2L family package 5×3.2 mm

From 40 MHz to 130 MHz LVDS Output



### DIMENSIONS



- SMT LVDS Clock oscillator in ceramic package
- Fundamental quartz mode frequency
- 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

### DESCRIPTION:

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

### APPLICATIONS:

- Avionics
- Airborne equipments
- Remote control
- Security application
- Radio Transceiver
- Microprocessor clocks

The MCSO2L's are supplied on trays (128 pcs / tray)  
 For pick-and-place equipment, the parts are available in 12mm tapes  
 with 250 parts min  
 1000 parts min

### ELECTRICAL CHARACTERISTICS AT +25°C

<b>Frequency stability (standard)</b> Over temperature range (see ordering info) Including: adjustment at 25°C long term aging 10 years over supply voltage ±5%	$\Delta F/F$	$\leq \pm 100$	ppm
<b>Frequency stability version T</b> Over temperature range (see ordering info) Including: adjustment at +25°C long term aging 1 year over supply voltage ±5%	$\Delta F/F$	$\leq \pm 50$	ppm
Supply voltage ± 5%	1)*	Vdd	2.5 / 3.3 V
Input current		Idd	see table 1
Output signal (load 100 ohm)			LVDS
Symmetry (max)			45 / 55 %
Rise & fall time (20% to 80%)			<1 ns
Level Logic low (Typ/min)			1.1 / 0.9 V
Level Logic high (Typ/max)			1.4 / 1.6 V
Start-up time	t		<5 ms
Jitter RMS (1KHz to 1MHz)			<0.3 ps
Phase noise typical at 100MHz			
Static conditions	10Hz		-70 dBc/Hz
BW = 1Hz	100Hz		-100 dBc/Hz
	1 kHz		-125 dBc/Hz
	10 kHz		-145 dBc/Hz
	100kHz		-150 dBc/Hz

\* 1) C = 47nF ceramic must be connected between GND & Vdd differential

