

Features

- LVDS Output
- Stabilities to ± 20 PPM
- Operating Temperature Ranges to -40°C to $+85^{\circ}\text{C}$
- Supply Voltages: 2.5V, 3.3V

2.5V SPECIFICATIONS		
PARAMETERS	MAX (Unless otherwise noted)	
Frequency Range	13.5 ~ 250MHz	
Temperature Range		
Storage (T_{STG})	$-55^{\circ}\text{C} \sim +125^{\circ}\text{C}$	
Supply Voltage (V_{DD})	2.5V $\pm 10\%$	3.3V $\pm 10\%$
Input Current (I_{DD})	50mA	
Standby Current	15 μA	
Output Symmetry (50% V_{P-P})	45 % ~ 55 %	
Rise Time (20%~80% V_{P-P})	500pS	
Fall Time (80%~20% V_{P-P})	500pS	
Differential Output Voltage (V_{OD})	0.247V ~ 0.454V	
Differential Offset Voltage (V_{OS})	1.125V ~ 1.375V	
Output Load (HCMOS)	100 Ohms Typical	
Start-up Time (T_S)	10 mS	
Output Disable Time ¹	200 μS	
Output Enable Time ¹	10 mS	
Aging (per year @ 25C)	± 3 PPM	
Phase Jitter (12kHz~20MHz)	1pS	

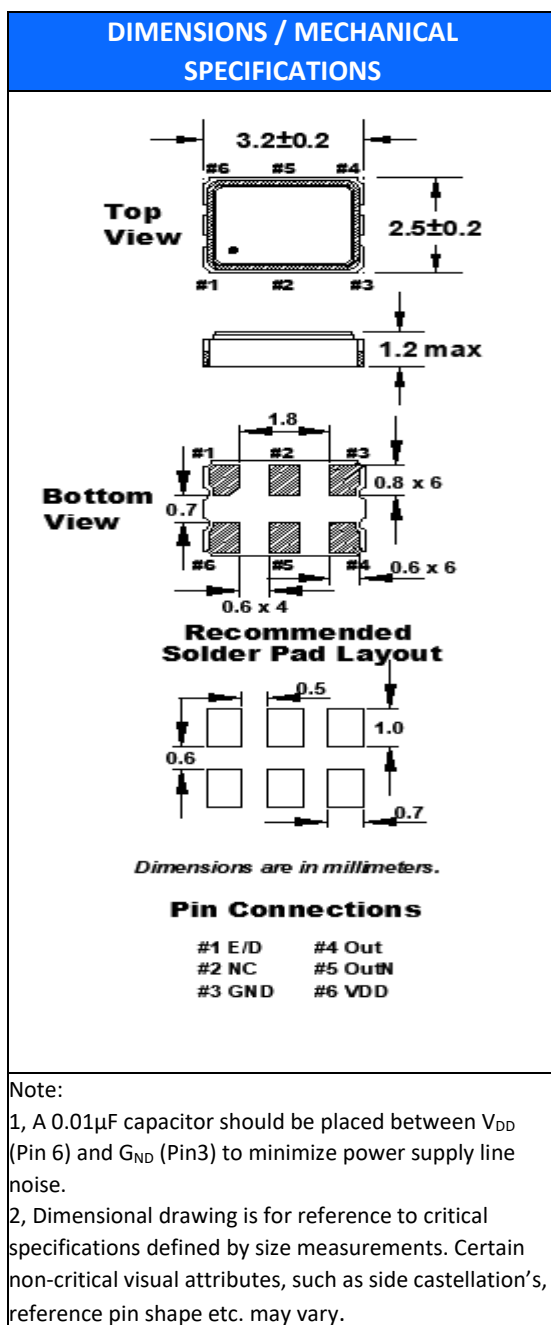
ENABLE / DISABLE FUNCTION	
Pin ¹	Out 1 (pin 4), Out 2 (pin 5)
OPEN ¹	Active
'1' Level $V_{IH} \geq 70\%V_{DD}$	Active
'0' Level $V_{IL} \leq 30\%V_{DD}$	High Z

Available Options by Stability & Operating Temp		
Frequency Stability ²	Operating Temperature ($^{\circ}\text{C}$)	Frequency Range (MHz)
± 100 PPM	$-20 \sim +70$	13.500 ~ 250.000
± 100 PPM	$-40 \sim +85$	13.500 ~ 250.000
± 50 PPM	$-20 \sim +70$	13.500 ~ 250.000
± 50 PPM	$-40 \sim +85$	13.500 ~ 250.000
± 25 PPM	$-20 \sim +70$	13.500 ~ 250.000
± 25 PPM ³	$-40 \sim +85$	13.500 ~ 250.000
± 20 PPM ³	$-20 \sim +70$	13.500 ~ 250.000

¹ An internal pull-up resistor from pin 1 to pin 6 allows active output if pin 1 is left open

² Inclusive of 25°C tolerance, operating temperature range, input voltage change, load change, Shock, vibration, reflow, and one-year aging.

³ Inclusive of 25°C tolerance and operating temperature range.



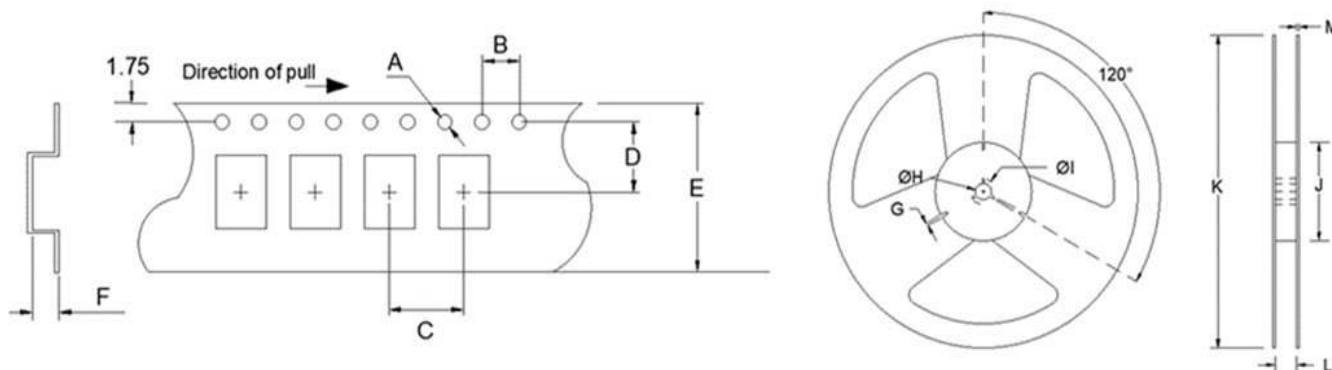
STANDARD SPECIFICATIONS	
PARAMETERS	MAX (Unless otherwise noted)
Maximum Soldering Temp / Time	260°C / 10 Seconds x 2
Moisture Sensitivity Level (MSL)	1
Termination Finish	Au over Ni
Seal Method	Seam
Lead (Pb) Free	Yes
ROHS/REACH Compliant	Yes

FO3LS

3.2mm x 2.5mm
SMD LVDS Oscillator



TAPE SPECIFICATIONS (mm)							REEL SPECIFICATIONS (mm)						
A	B	C	D	E	F	REEL QTY	G	H	I	J	K	L	M
ø1.5	4.0	4.0	3.5	8.0	1.4	-T1 = 1,000 -T3 = 3,000	2.0	ø13	ø21	ø60	ø180	9.0	1.2



Available Options & Part Identification for SMD LVDS Oscillator O3LS*						
Sample PN: <u>FO3LSCDM125.0-T1</u>						
F	O3LS	C	D	M	125.0	-T1
<u>Fox</u>	<u>Model Number</u>	<u>Voltage</u> J = 2.5V±10% C = 3.3V±10%	<u>Stability</u> A = ±100 PPM B = ±50 PPM D = ±25 PPM E = ±20 PPM	<u>Operating Temperature</u> F = -20 to +70°C M = -40 to +85°C	<u>Frequency (MHz)</u>	<u>Values Added Options</u> Blank = Bulk T1 = 1,000 pcs T3 = 3,000 pcs

* Not all frequencies in the frequency range, or every combination of stability, temp range, and voltage available. See stabilities and op temps for each V_{DD}.

Reliability Test Conditions
Please contact Abracon Quality Assurance department