

Features

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

2.5V ELECTRICAL CHARACTERISTICS		
PARAMETERS	MAX (Unless otherwise noted)	
Frequency (F_o)	25.0 ~ 400.0 MHz	
Storage Temperature Range (T_{STG})	$-55 \sim +125^{\circ}\text{C}$	
Supply Voltage (V_{DD})	2.5V $\pm 10\%$	3.3V $\pm 10\%$
Input Current (I_{DD})	63 mA	
Standby Current	30 μA	
Output Symmetry (50% V_{P-P})	45% ~ 55%	
Rise Time (20%~80% V_{P-P})	0.5 nS	
Fall Time (80%~20% V_{P-P})	0.5 nS	
Differential Output Voltage (V_{OD})	0.247V ~ 0.454V	
Differential Offset Voltage (V_{OS})	1.125V ~ 1.375V	
Output Termination	100 Ohms Typical	
Start-up Time (T_S)	10 mS	
Output Disable Time ¹	200 nS	
Output Enable Time ¹	10 mS	
Aging (per year @ 25C)	± 3 PPM	
Phase Jitter (12kHz~20MHz)	1 pS	

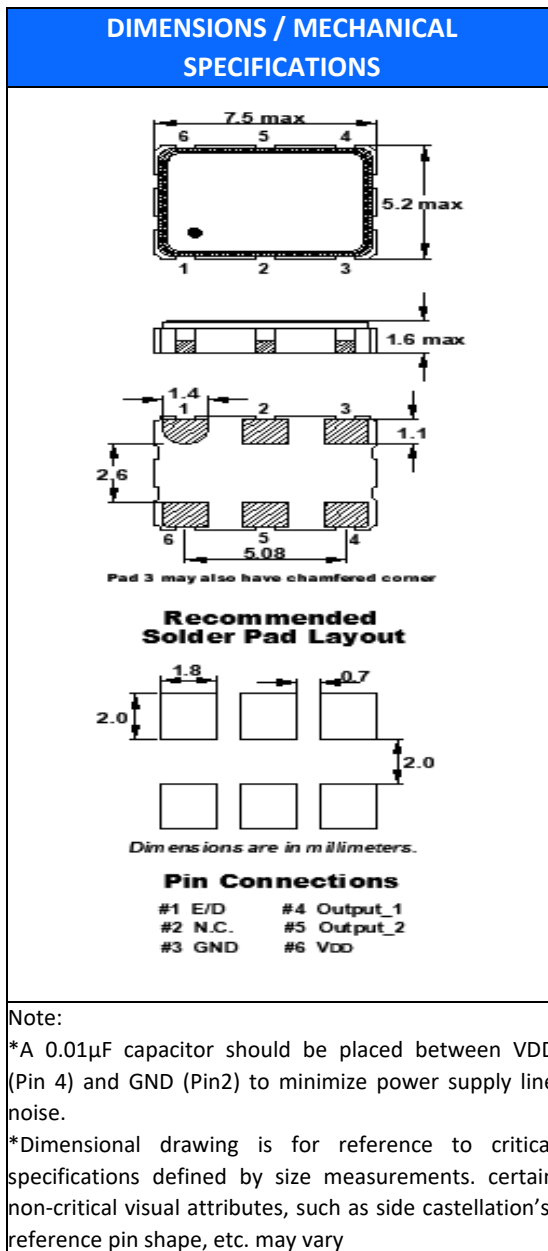
ENABLE / DISABLE FUNCTION	
Pin ¹	Out 1 (pin 4), Out 2 (pin 5)
OPEN ¹	Active
'1' Level $V_{IH} \geq 70\%V_{DD}$	Active
'0' Level $V_{IL} \leq 30\%V_{DD}$	High Z

Available Options by Stability & Operating Temp for 2.5V		
Frequency Stability ²	Operating Temperature ($^{\circ}\text{C}$)	Frequency Range (MHz)
$\pm 100\text{PPM}^2$	$-10 \sim +70$	25.0 ~ 400.0
$\pm 100\text{PPM}^2$	$-40 \sim +85$	25.0 ~ 400.0
$\pm 100\text{PPM}^2$	$-40 \sim +105$	25.0 ~ 300.0
$\pm 50\text{PPM}^2$	$-10 \sim +70$	25.0 ~ 400.0
$\pm 50\text{PPM}^2$	$-40 \sim +85$	25.0 ~ 400.0
$\pm 50\text{PPM}^2$	$-40 \sim +105$	25.0 ~ 300.0
$\pm 25\text{PPM}^2$	$-10 \sim +70$	25.0 ~ 400.0
$\pm 25\text{PPM}^3$	$-40 \sim +85$	25.0 ~ 400.0
$\pm 20\text{PPM}^3$	$-10 \sim +70$	25.0 ~ 400.0

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 $^{\circ}\text{C}$ tolerance, operating temperature range, input voltage change, load change, Vibration, reflow, and one-year aging, shock, and vibration.

³ Inclusive of 25 $^{\circ}\text{C}$ 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) per J-STD-033	1
Termination Finish	Au (0.3~1 μ m) over Ni (1.27~8.89 μ m)
Seal Method	Seam
Lead (Pb) Free	Yes
RoHS Compliant	Yes, no exemptions
REACH Compliant	Yes

FO7LS

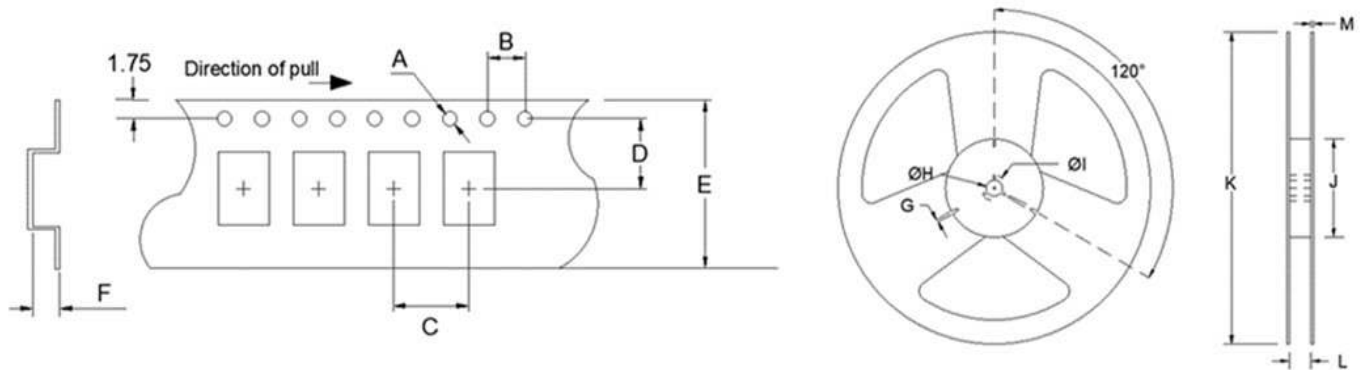
(Former F4700, F4710 Series)

7.0mm x 5.0mm

LVDS Oscillator



TAPE SPECIFICATIONS (mm)							REEL SPECIFICATIONS (mm)						
A	B	C	D	E	F	REEL QTY	G	H	I	J	K	L	M
ø1.55	4.0	8.0	7.5	16.0	2.1	-T2 = 2,000 -T1 = 1,000	2.0	ø13	ø21	ø80	ø255	17.5	2.0



Available Options & Part Identification for LVDS Oscillator O7LS*

Sample PN: **FO7LS~~CDM~~125.0-T2**

F	O7LS	C	D	M	125.0	-T2
Fox	Model Number	Voltage J = 2.5V±10% C = 3.3V±10%	Stability A = ±100PPM B = ±50PPM D = ±25PPM E = ±20 PPM	Operating Temperature E = -10 to +70°C M = -40 to +85°C P = -40 to +105°C	Frequency (MHz)	Values Added Options Blank = Bulk T1 = 1,000 pcs T2 = 2,000 pcs

* Not all frequencies in the frequency range, or every combination of stability, temp range, and voltage available. See stabilities and op temps table on page 2.

Reliability Test Conditions

Please contact Abracon Quality Assurance department