



1. Electrical Parameters

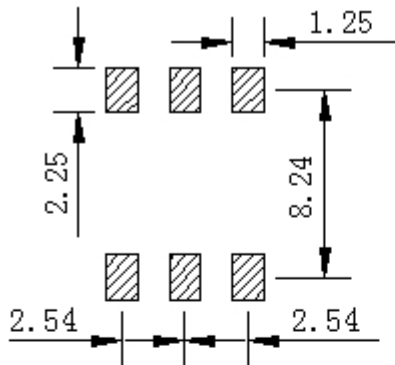
MODEL: O11F-3402-40.00MHz							
Item	Description	Parameters			Unit	Test Condition	
		Min.	Typ.	Max.			
Output	Frequency	40.00			MHz		
	Output Waveform	Sine wave					
	Vp-p	0.8		1.2	V		
	Load	10KΩ//10pF					
	Harmonics Suppression			-30	dBc		
	Spurious Suppression			-60	dBc		
Frequency Stabilities	Frequency Tolerance vs. Operating Temperature Range	-0.025		+0.025	$\times 10^{-6}$	T_A varied from -40°C to 85°C , measurement referenced to frequency observed with $f_{ref}=(f_{max}+f_{min})/2$, $V_{cc}=3.3\text{V}$, $O_{load}=10\text{K}\Omega//10\text{pF}$, temperature variable speed less than 2°C per minute.	
	Initial Frequency Tolerance	-0.5		+0.5	$\times 10^{-6}$	Measurement referenced to frequency observed with $T_A=25^{\circ}\text{C}$, $V_{cc}=3.3\text{V}$, and after 15 minutes of operation, within 30 days after ex-works.	
	Frequency Slope in Still air	-2		+2	$10^{-9}/^{\circ}\text{C}$	Temperature ramp 1°C per minute max	
	Reflow shift	-1		+1	$\times 10^{-6}$	After 1 hour recovery at 25°C	
	Frequency Tolerance vs. Supply Voltage		± 0.01		$\times 10^{-6}$	measurement referenced to frequency observed $T_A=25^{\circ}\text{C}$, V_{cc} varied from 3.13V to 3.47V, $O_{load}=10\text{K}\Omega//10\text{pF}$.	
	Frequency Tolerance vs. Load		± 0.01		$\times 10^{-6}$	$\pm 5\text{pF}$ load change measurement referenced to frequency observed with $T_A=25^{\circ}\text{C}$, $V_{cc}=3.3\text{V}$, and $O_{Load}=10\text{K}\Omega//10\text{pF}$.	
	ADEV				0.2	$\times 10^{-9}$	Temperature stability, no EMI\EMC or other interference, test after power for 24hours, 25°C ; 1s.
					0.4	$\times 10^{-9}$	Temperature stability, no EMI\EMC or other interference, test after power for 24hours, 25°C ; 10s.
					0.6	$\times 10^{-9}$	Temperature stability, no EMI\EMC or other interference, test after power for 24hours, 25°C ; 100s.
					0.6	$\times 10^{-9}$	Temperature stability, no EMI\EMC or other interference, test after power for 48hours, 25°C ; 1000s.



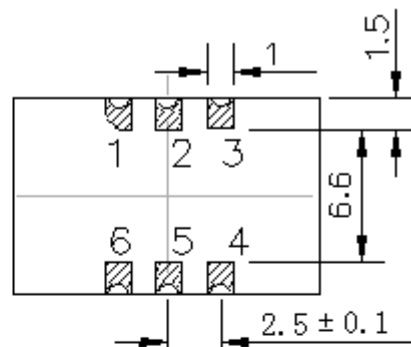
				0.6	$\times 10^{-9}$	Temperature stability, no EMI\EMC or other interference, test after power for 7 days, 25°C; 10000s.
	Aging Tolerance Per Day	-5		+5	$\times 10^{-9}$	V _{cc} , T _A constant Measurement referenced to frequency observed with T _A =25°C, V _{cc} =3.3V, O _{load} =10KΩ//10pF and after 30 days of operation.
	Aging Tolerance 1 Year	-0.5		+0.5	$\times 10^{-6}$	
	Aging Tolerance 10 Year	-3		+3	$\times 10^{-6}$	
	Holdover 24hours Drift			±4		$\times 10^{-9}$
Power Supply	Supply Voltage	3.13	3.3	3.47	V	
	Steady Consumption			250	mA	@25°C
	Warm up current			560	mA	
	Warm-Up Time			15	min	@25°C within ±0.02 × 10 ⁻⁶ of final frequency with reference after 1 hour on in Still air
Phase Noise	Phase Noise @25°C in Still air		-100	-90	dBc/Hz	10Hz
			-130	-120		100Hz
			-145	-140		1KHz
			-150	-145		10KHz
			-150	-145		100KHz
			-155	-150		1MHz
Environmental Conditions	Operable Temperature	-40		+85	°C	
	Storage Temperature	-55		+105	°C	
	ESD Level	Human Body Model, class2: 2000V to 4000V; ANSI/ESDA/JEDEC JS-001-2010				
		Machine Model, class B: 200V to 400V; ANSI/ESDA/JEDEC JS-001-2010				
	Moisture Sensitivity Level	IPC/JEDEC J-STD-020, Level 2				
	Temperatur cycling	IEC 60068-2-14 test Na, -40 °C to +125 °C, 400 cycles				
	Solderability	JESD 22-B102D, Method 2				
	Humidity	EIA/JEDEC22-A101, 85 °C/85%R.H., 1000 hours				
	Vibration	IEC 60068-2-6, test Fc: 20g, 60 to 2000Hz 12 hours total				
	Shock	IEC 60068-2-27, test Ea; 1500g, 0.5ms, 18 shocks total				
RoHS	Parts are fully compliant with the European Union directive 2002/95/EC on the restriction of the use of certain hazardous substances in electrical and electronic equipment. Note parts are suitable for assembly using both Lead-free solders and Tin/Lead solders					



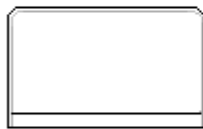
2. Mechanical Structure(mm)



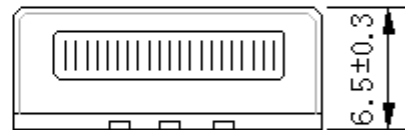
Solder Pad layout



Bottom view



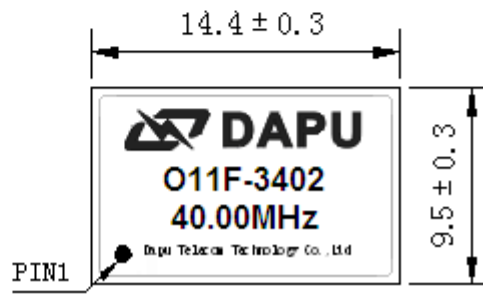
Right view



Side view

PIN FUNCTION

PIN	FUNCTION
1	NC
2,5	NC
3	GND
4	OUTPUT
6	VCC



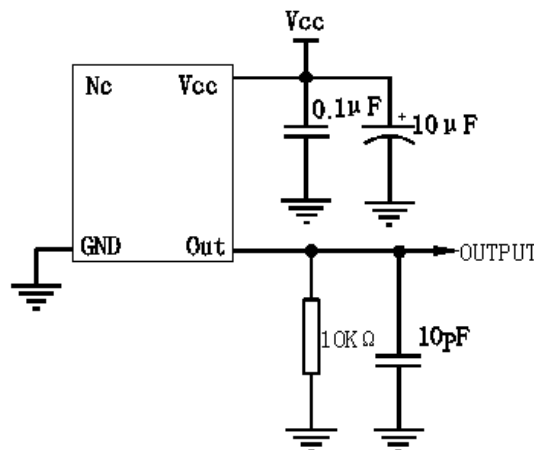
Top view

Note1: Tolerance $\pm 0.2\text{mm}$ without mark

Note2: Referential Weight 1.5g

Note3: NC is not connect

3. Test Circuit





4. Reflow Soldering Curve (RoHS)



5. Package: Tape & Reel (mm)

