



1. Electrical Parameters

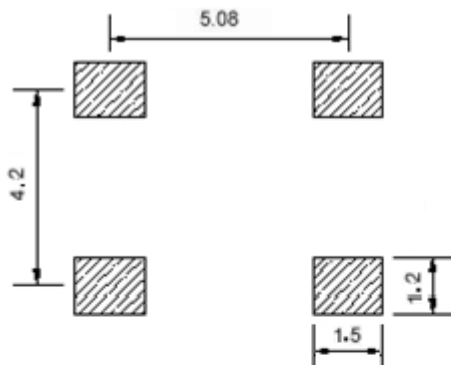
MODEL: T75B-1802-50.00MHz						
Item	Description	Parameters			Unit	Test Condition
		Min.	Typ.	Max.		
Output	Frequency	50.00			MHz	
	Output Waveform	HCMOS				
	Output Low Voltage			0.33	V	$V_{cc}=3.3V, O_{load}=10\text{ pF}$
	Output High Voltage	2.97			V	$V_{cc}=3.3V, O_{load}=10\text{ pF}$
	Duty Cycle	45	50	55	%	@50%
	Rise / Fall Time (10%~90%)			5	ns	@25°C
	Load	10			pF	
Frequency Stabilities	Frequency Tolerance vs. Operating Temperature Range	-1		+1	$\times 10^{-6}$	T_A varied from -40°C to 85°C, measurement referenced to frequency observed with $f_{ref}=(f_{max}+f_{min})/2$, $V_{cc}=3.3V, O_{load}=10\text{ pF}$, temperature variable speed less than 2°C per minute.
	Initial Frequency Tolerance	-1		+1	$\times 10^{-6}$	Measurement referenced to frequency observed with $T_A = 25^\circ\text{C} \pm 2^\circ\text{C}$, $V_{cc}=3.3V$, within 30 days after ex-works.
	Frequency Tolerance vs. Supply Voltage	-0.1		+0.1	$\times 10^{-6}$	measurement referenced to frequency observed $T_A=25^\circ\text{C}$, V_{cc} varied from 3.13V to 3.47V, and $O_{Load}=10\text{ pF}$.
	Frequency Tolerance vs. Load	-0.4		+0.4	$\times 10^{-6}$	5% load change measurement referenced to frequency observed with $T_A=25^\circ\text{C}, V_{cc}=3.3V, O_{Load}=10\text{ pF}$.
	Aging Tolerance 10 Years	-5		+5	$\times 10^{-6}$	$T_A=25^\circ\text{C}, V_{cc}=3.3V$ and after 1h of operation.
Power Supply	Current Consumption			30	mA	@25°C, $V_{cc}=3.3V, O_{load}=10\text{ pF}$.
	Supply Voltage	3.14	3.3	3.46	V	
	Start-up time			5	ms	vs. Frequency: Within ± 1.0 ppm
			50	ms	vs. Output Level: To 90% of V_{p-p}	



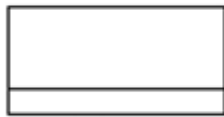
Phase Noise	Phase Noise @25°C		-78	-75	dBc/Hz	10Hz
			-108	-105		100Hz
			-133	-130		1KHz
			-143	-140		10KHz
			-148	-145		100KHz
			-153	-150		1MHz
Environmental Conditions	Operable Temperature	-40		+85	°C	
	Storage Temperature	-55		+90	°C	
	ESD Level	Human Body Model,class2: 2000V to 4000V; ANSI/ESDA/JEDEC JS-001-2010.				
		Machine Model, class B: 200V to 400V; ANSI/ESDA/JEDEC JS-001-2010.				
	Moisture Sensitivity Level	Level 3.				
	Vibration	Test Condition: 0.75mm ;acceleration:10g;10Hz~2000Hz, one cycle per 30 min, test 2 hour. (3 times for each 3 directions X ,Y , Z) .IEC 68-2-06 Test Fc.				
Shock	100g; 6ms; half sine wave (3 times for each 3 directions X ,Y, Z),IEC 68-2-27 Test Ea/Severity 50A.					
Full Package Storage	Relative humidity (%)	20%~70%				
	Temperature (°C)	-10~35°C				



2. Mechanical Structure(mm)



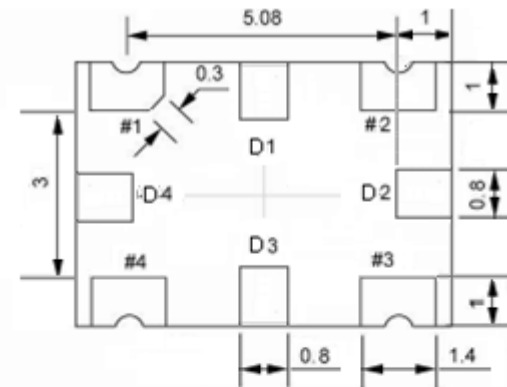
Solder pad layout



Right view

PIN FUNCTION

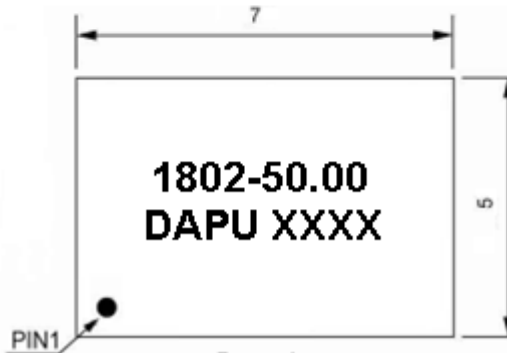
PIN	NOTATION	FUNCTION
D1,D2,D3,D4	NC	Not Connect
1	NC	Not Connect
2	GND	GND
3	OUTPUT	RF Output
4	VCC	Supply Voltage



Bottom view



Side view



Top view

Note1: Tolerance $\pm 0.20\text{mm}$ without mark

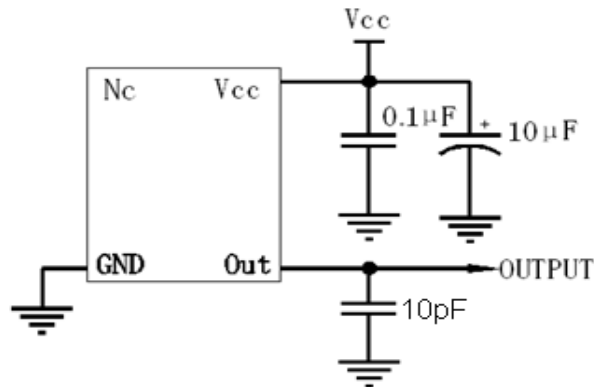
Note2: The first two xx representative: week
After two xx representative: year

Note3: Referential Weight 0.2g

Note4: NC is not connect



3. Test circuit



4. Reflow Soldering Curve (RoHS)



5. Package: Tape & Reel (mm)

