

Table of amendment

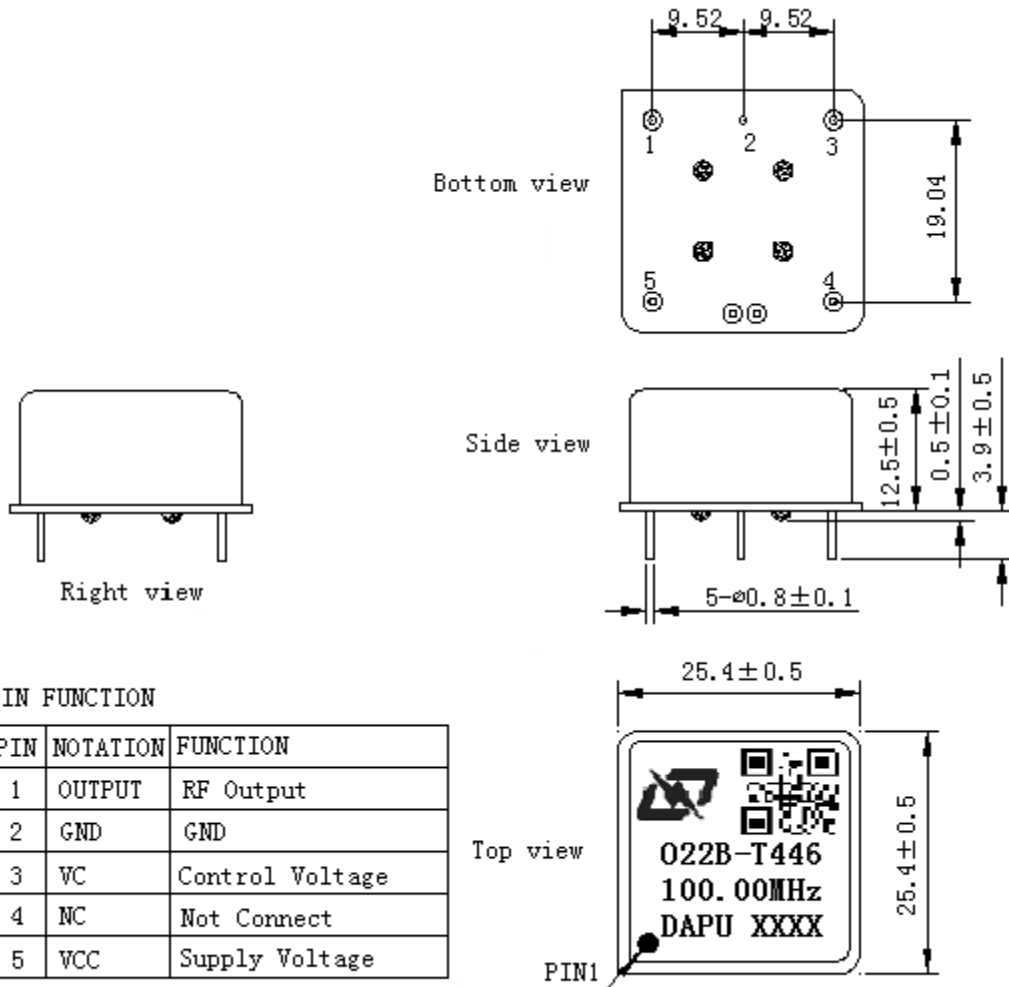
Version	Revisioncontents	Prepared by	Revised date
1.0	The first issued	<i>Amway</i>	2012.06.25
1.1	“Steady Consumption” and “Warm up current” and “Frequency Tolerance vs Operating Temperature Range Test Condition” change	<i>Amway</i>	2013.08.13
1.2	“Phase Noise” change	<i>Amway</i>	2013.09.24
1.4	“Cut-off Frequency” add “Mechanical Structure” change	<i>Amway</i>	2014.08.26
1.5	Modified the 1 st page “Full Package Storage” added “Frequency Tuning Range” and “Mechanical Structure” changed	<i>Amway</i>	2015.11.11
1.6	“Warm-Up Time” added “Frequency Tuning Range” changed	<i>Amway</i>	2016.01.12
1.7	The “Mechanical Structure” “ESD Level” changed	<i>Amway</i>	2020.03.02
1.8	The “Short Term Stability: Allan Variance” “Mechanical Structure” changed	<i>Amway</i>	2020.07.17

1. Electrical Parameters

MODEL ÖO22B-T446-100.00MHz						
Item	Description	Parameters			Unit	Test Condition
		Min.	Typ.	Max.		
Output	Frequency	100.00			MHz	
	Output Waveform	Sine wave				
	Level	7			dBm	
	Load	50			Ω	
	Harmonics Suppression			-30	dBc	
	Spurious Suppression			-75	dBc	
Frequency Stabilities	Frequency Tolerance vs. Operating Temperature Range	-0.05		+0.05	$h 10^{-6}$	T_A varied from -40 to 80, measurement referenced to frequency observed with $f_{ref}=(f_{max}+f_{min})/2$, $V_{cc}=12.0V$, $V_c=2.5V$, $O_{load}=50\Omega$, temperature rise speed less than 2 per minute
	Initial Frequency Tolerance	-0.1		+0.1	$h 10^{-6}$	Measurement referenced to frequency observed with $T_A=25$, $V_{cc}=12.0V$, $V_c=2.5V$ and after 15 minutes of operation within 30 days after ex works.
	Frequency Tolerance vs. supply voltage	-0.05		+0.05	$h 10^{-6}$	measurement referenced to frequency observed $T_A=25$, V_{cc} varied from 11.4 to 12.6V, $V_c=2.5V$, $O_{load}=50\Omega$.
	Frequency Tolerance vs. Load	-0.05		+0.05	$h 10^{-6}$	5% Load Change Measurement referenced to frequency observed with $T_A=25$, $V_{cc}=12.0V$, $V_c=2.5V$, $O_{load}=50\Omega$.
	Short Term Stability: Allan Variance			0.01	$h 10^{-9}$	Temperature stability, no EMC or other interference test after power for 1 hour ref. to 25; 1s
	Aging Tolerance per day	-1		+1	$h 10^{-9}$	V_{cc} , V_c , T_A constant Measurement referenced to frequency observed with
	Aging Tolerance 1Year	-0.1		+0.1	$h 10^{-6}$	$T_A=25$, $V_{cc}=12.0V$, $V_c=2.5V$, $O_{load}=50\Omega$ and after 30 days of operation
Power Supply	Supply Voltage	11.4	12.0	12.6	V	
	Steady Consumption			150	mA	@25
	Warm up current			370	mA	
	Warm-Up Time			15	minutes	@25 within $\pm 0.05 h 10^{-6}$ of final frequency with reference after 1 hour.

Voltage Control Characteristics	Frequency Tuning Range			-2	$h 10^{-6}$	$V_c=0V$. measurement referenced to $V_c=2.5V$.
		-0.1		+0.1	$h 10^{-6}$	$V_c=2.5V$. measurement referenced to exactly 100.00MHz.
		+2			$h 10^{-6}$	$V_c=5.0V$. measurement referenced to $V_c=2.5V$.
	Linearity			10	%	
	Slope	Positive				
	Input Impedance	100				K Ω
	Cut-off Frequency	50				KHz 3dB
Phase Noise	Phase Noise @25		-90	-85	dBc/Hz	10Hz
			-130	-125		100Hz
			-155	-150		1KHz
			-165	-160		10KHz
			-168	-163		100KHz
			-170	-165		1MHz
Environmental Conditions	Operable Temperature	-40		+85		
	Storage Temperature	-55		+105		
	ESD Level	Human Body Model, class 2: 2000V to 4000V; ANSI/ESDA/JEDEC-061-2010				
		Machine Model, class B 200V to 400V, JEDEC JESD22A115C.				
	Moisture Sensitivity Level	Not humidity sensitive.				
	Vibration	Test Condition: 0.75mm ; acceleration: 10g, 500Hz, one cycle per 30 min, test 2 hour. (3 times for each directions X, Y, Z) IEC 68-2-06 Test Fc.				
Shock	50g; 11ms, 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 ()	-10~35				

2 Mechanical Structure (mm)



Note1: Tolerance± 0.2mm without mark

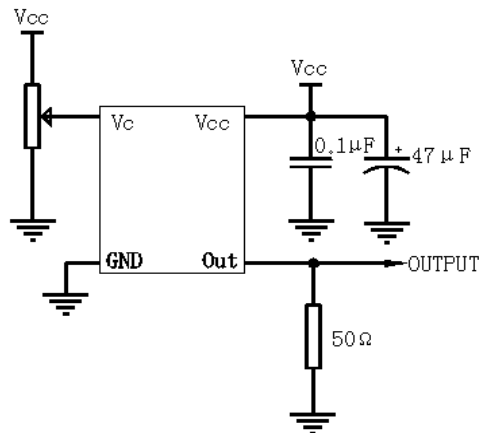
Note2: The first two xx representative: week

After two xx representative: year

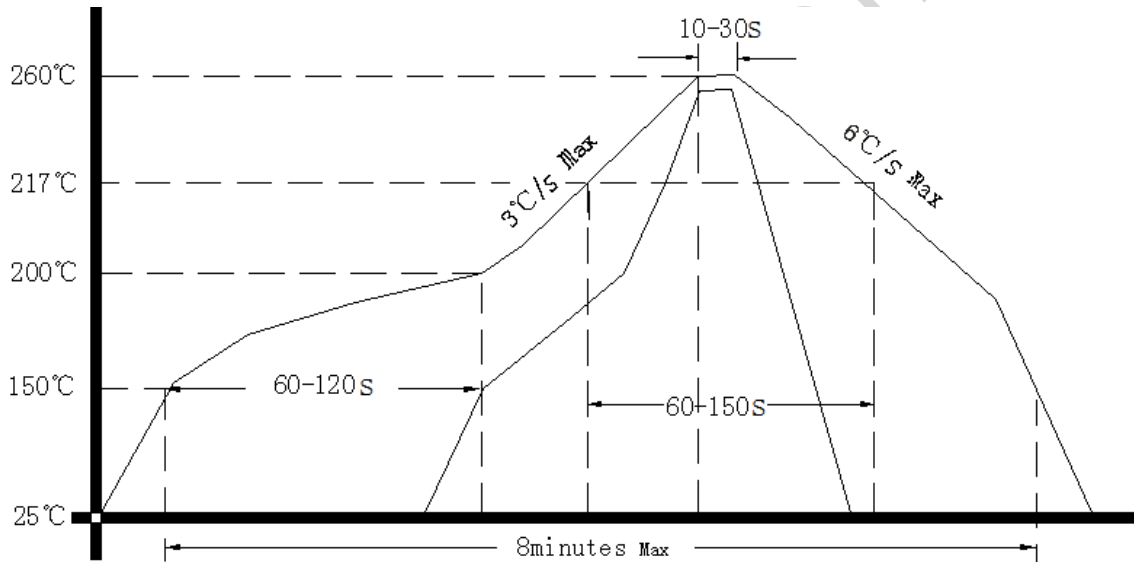
Note3: ReferentialWeight 13.6g

Note4: NC is not connect

3. Test Circuit



4. Reflow Soldering Curve(RoHS)



5. Package Ämm Å

