Travelling Merchant:_____

DATASHEET

Standard: **O11E-I425-100.00MHz-G345**

P/N: _____

Plot			The Label
Drew	Audited	Approved	Stamp, please! Thanks!
Amway.wei	Tony · Wang	Jason Zhao	
Date: 2024.02.18			

Guangdong Dapu Telecom Technology Co.,Ltd

Building 5, No.24, Industrial East Road, Songshanhu Park, Dongguan, Guangdong, P.R. China

TEL：0086-0769-88010888 FAX：0086-0769-81800098

Building 5, No.24, Industrial East Road,
Songshanhu Park, Dongguan,
Guangdong, P.R. China
TEL:0086-0769-88010888
FAX:0086-0769-81800098

Table of amendment

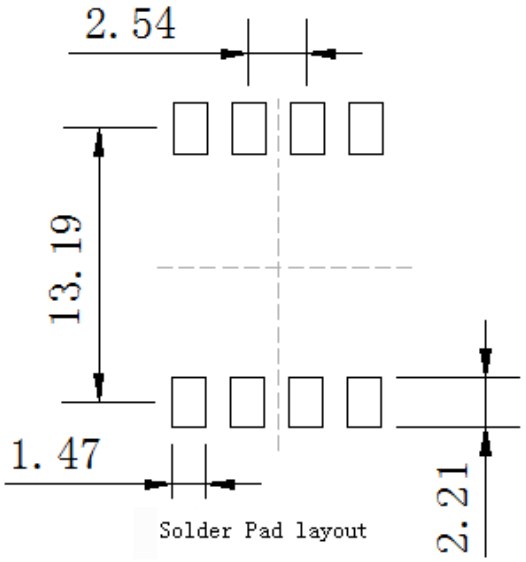
Version	Revision contents	Prepared by	Revised date
1.0	The first issued	Amway	2024.02.18

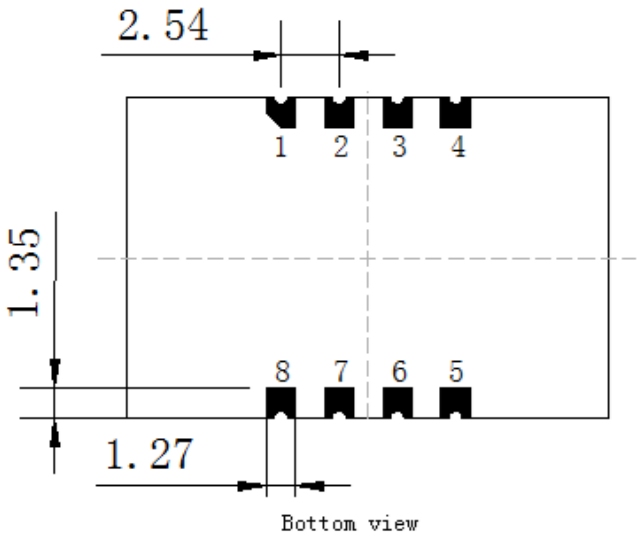
1. Electrical Parameters

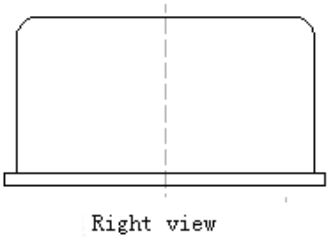
MODEL： O11E-I425-100.00MHz-G345						
Item	Description	Parameters			Unit	Test Condition
		Min.	Typ.	Max.		
Output	Frequency		100.00		MHz	
	Output Waveform		Sine Wave			
	Level	10			dBm	
	Harmonics Suppression			-30	dBc	
	Spurious Suppression			-80	dBc	
	Load		50		Ω	
Frequency Stabilities	Frequency Tolerance vs. Operating Temperature Range	-0.1		+0.1	$\times 10^{-6}$	T_A varied from -20℃ to 70℃, measurement referenced to frequency observed with $f_{ref}=(f_{max}+f_{min})/2$, V_{cc}=5.0V, O_{load}=50Ω, temperature variable speed less than 2℃per minute.
	Initial Frequency Tolerance	-0.5		+0.5	$\times 10^{-6}$	Measurement referenced to frequency observed with T_A=25℃, V_{cc}=5.0V, V_c=2.25V and after 15 minutes of operation, within 30 days after ex-works.
	Frequency Tolerance vs. Supply Voltage	-0.01		+0.01	$\times 10^{-6}$	measurement referenced to frequency observed T_A=25℃, V_{cc} varied from 4.75V to 5.25V, V_c=2.25V and O_{Load}=50Ω.
	Frequency Tolerance vs. Load	-0.01		+0.01	$\times 10^{-6}$	5% load change measurement referenced to frequency observed with T_A=25℃, V_{cc}=5.0V, V_c=2.25V and O_{Load}=50Ω.
	Short-Term Stability Allan Variance		0.05		$\times 10^{-9}$	Temperature stability, no EMI\EMC or other interference，test after power for 1hour ref. to 25℃; 0.01s to 1s.
	Retrace		±0.02		$\times 10^{-6}$	After 24 hours off @25℃ 30 min power on
	G-sensitivity			±3	$\times 10^{-9}$/g	Worst direction
	Aging Tolerance Per Day		±5		$\times 10^{-9}$	V_{cc},V_c, T_A constant measurement referenced to frequency observed with T_A=25℃, V_{cc}=5.0V, V_c=2.25V and after 30 days of operation.
	Aging Tolerance 1 Year		±0.5		$\times 10^{-6}$	
	Aging Tolerance 10 Years			± 2	$\times 10^{-6}$	

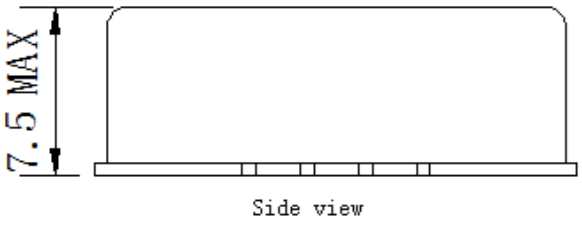
Power Supply	Supply Voltage	4.75	5.0	5.25	V	
	Steady Consumption			240	mA	@25℃
	Warm up current			700	mA	
	Reference Voltage		4.5		V	
	Warm-Up Time			5	minutes	@25℃within $\pm 0.1\times 10^{-6}$ of final Frequency with reference after 1 hour on.
Voltage Control Characteristics	Frequency Tuning Range			-1.5	$\times 10^{-6}$	V_c=0V. measurement referenced to V_c=2.25V
		-0.5		+0.5	$\times 10^{-6}$	V_c=2.25V. measurement referenced to exactly 100.00MHz
		+1.5			$\times 10^{-6}$	V_c=4.5V. measurement referenced to V_c=2.25V
	Deviation Slope		1.3		$\times 10^{-6}$/V	
	Linearity			10	%	
	Slope	Positive				
	Input Impedance	10			KΩ	
Phase Noise	Phase Noise		-100		dBc/Hz	10Hz
				-130		100Hz
				-160		1KHz
				-172		10KHz
				-178		100KHz
Environmental Conditions	Operable Temperature	-20		+70	℃	
	Storage Temperature	-55		+125	℃	
	ESD Level	Human Body Model, class2: 2000V to 4000V; ANSI/ESDA/JEDEC JS-001-2010.				
		Machine Model, class B: 200V to 400V; JEDEC JESD22-A115C.				
	Moisture Sensitivity Level	Not humidity sensitive.				
	Vibration	Test Condition: 0.75mm ;acceleration:10g;10Hz～500Hz, one cycle per 30 min, test 2 hour. (3 times for each 3 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.				

2. Mechanical Structure (mm)



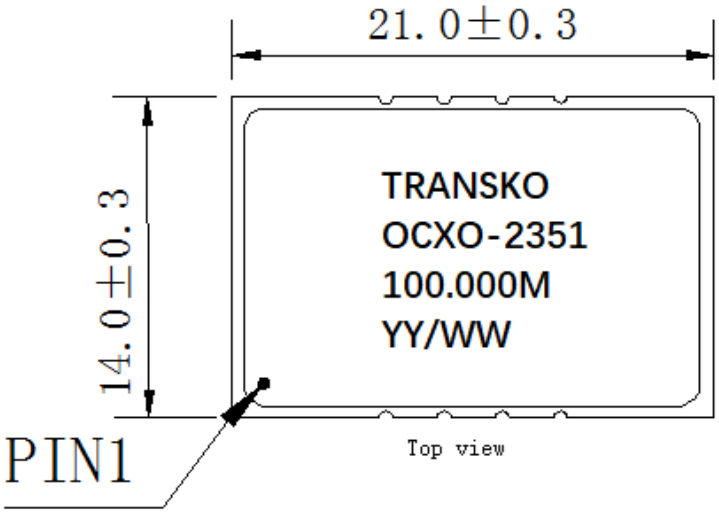






PIN FUNCTION

PIN	FUNCTION
1	VCC
2, 3, 6, 8	GND
4	OUT PUT
5	VC
7	Vref



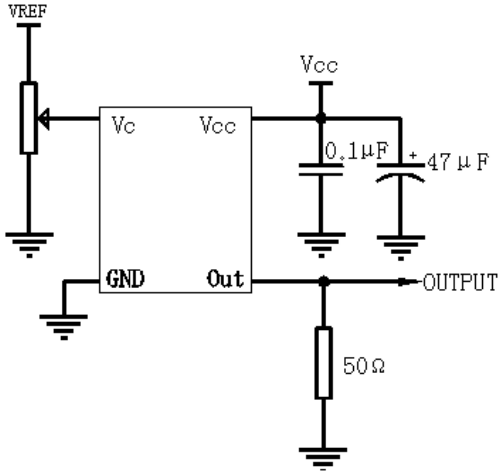
Note1: Tolerance ± 0.2mm without mark

Note2: The first two YY representative: year
After two WW representative: week

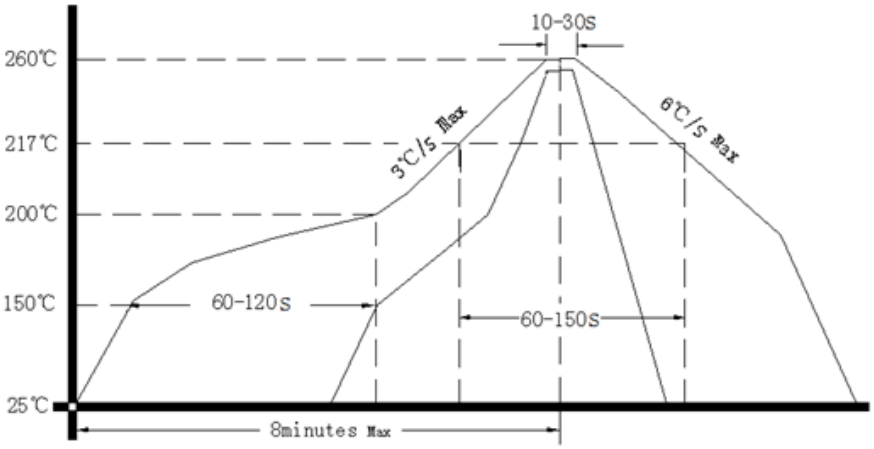
Note3: Referential Weight 4.2g

Note4: NC is not connect

3. Test Circuit



4. Reflow Soldering Curve (RoHS)



5. Package: Tape & Reel (mm)