Travelling Merchant:_____

DATASHEET

Standard: **O54A-P349-20.00MHz**

P/N: _____

Plot			The Label
Drew	Audited	Approved	Stamp, please! Thanks!
Amway.wei	Tony · Wang	James.Liu	
Date: 2018.07.16			

Guangdong Dapu Telecom Technology Co.,Ltd

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Table of amendment

Version	Revision contents	Prepared by	Revised date
1.0	The first issued	Amway	2018.07.16

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1. Electrical Parameters

MODEL： O54A-P349-20.00MHz						
Item	Description	Parameters			Unit	Test Condition
		Min.	Typ.	Max.		
Output	Frequency		20.00		MHz	
	Output Waveform		HCMOS			
	Output Low Voltage			0.4	V	V_{cc}=12.0V, O_{load}=15pF
	Output High Voltage	2.4			V	V_{cc}=12.0V, O_{load}=15pF
	Duty Cycle	45	50	55	%	@50%
	Rise / Fall Time (10%~90%)			5	ns	@25℃
	Load		15		pF	
Frequency Stabilities	Frequency Tolerance vs. Operating Temperature Range	-0.01		+0.01	$\times 10^{-9}$	T_A varied from -20℃to 70℃,f=(f_{max}-f_{min})/2f_0, V_{cc}=12.0V, O_{load}=15pF, temperature variable speed less than 2℃per minute.
	Initial Frequency Tolerance	-0.05		+0.05	$\times 10^{-6}$	Measurement referenced to frequency observed with T_A=25℃, V_{cc}=12.0V, and after 15 minutes of operation, within 30 days after ex-works.
	Frequency Tolerance vs. Supply Voltage	-0.01		+0.01	$\times 10^{-9}$	measurement referenced to frequency observed T_A=25℃, V_{cc} varied from 11.4V to 12.6V, and O_{Load}=15pF.
	Frequency Tolerance vs. Load	-0.01		+0.01	$\times 10^{-9}$	10% load change measurement referenced to frequency observed with T_A=25℃,V_{cc}=12.0V, and O_{Load}=15pF.
	Short-Term Stability : Allan Variance			0.01	$\times 10^{-9}$	Temperature stability, no EMI\EMC or other interference，test after power for 1hour ref. to 25℃; 1s, using PN9000 equipment.
	Aging Tolerance Per Day	-0.2		+0.2	$\times 10^{-9}$	V_{cc}, T_A constant measurement referenced to frequency observed with T_A=25℃,V_{cc}=12.0V, and after 30 days of operation.
	Aging Tolerance First Year	-0.02		+0.02	$\times 10^{-6}$	
Power Supply	Supply Voltage	11.4	12.0	12.6	V	
	Steady Consumption			450	mA	@25℃
	Warm-up Time			15	minute	@25℃within ±0.05×10^{-6} of final frequency with reference after 1 hour on.
	Warm up current			750	mA	

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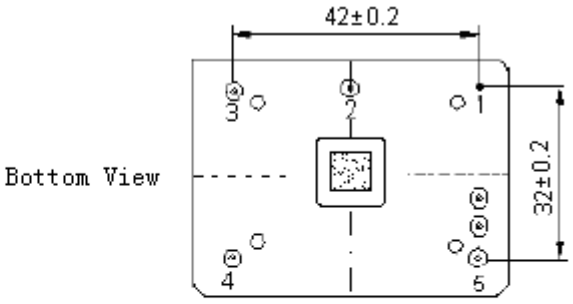
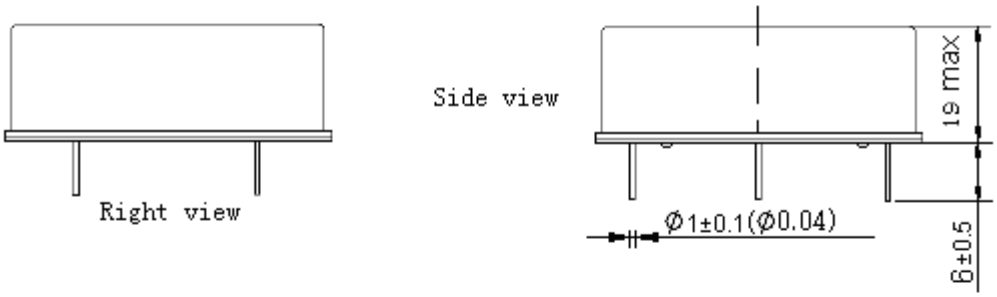
Phase Noise	Phase Noise		-95	-90	dBc/Hz	1Hz
			-125	-120		10Hz
			-140	-135		100Hz
			-150	-145		1KHz
			-150	-145		10KHz
Environmental Conditions	Operable Temperature	-20		+70	℃	
	Storage Temperature	-55		+105	℃	
	ESD Level	Human Body Model, class2: 2000V to 4000V; ANSI/ESDA/JEDEC JS-001-2010.				
		Machine Model, class B: 200V to 400V; ANSI/ESDA/JEDEC JS-001-2010.				
	Moisture Sensitivity Level	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.				
Full Package Storage	Relative humidity (%)	20%～70%				
	Temperature (℃)	-10~35℃				

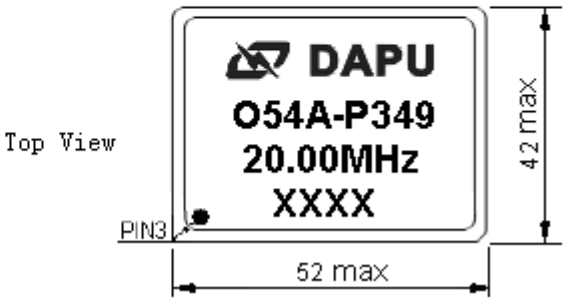
2. Mechanical Structure (mm)





PIN FUNCTION

PIN	NOTATION	FUNCTION
1	GND	GND
2	NC	Not Connect
3	NC	Not Connect
4	VCC	Supply Voltage
5	OUTPUT	RF Output



Note1: Tolerance ± 0.2mm without mark

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

Note3: Referential weight 78g

Note4: NC is not connect

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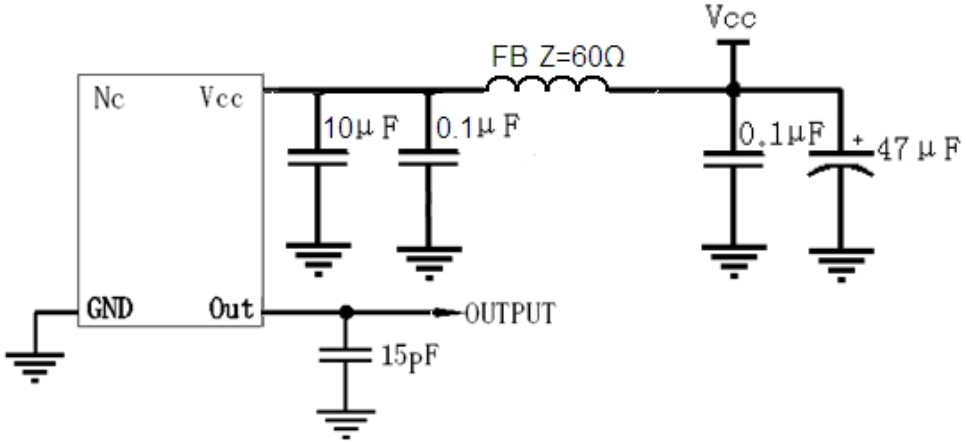
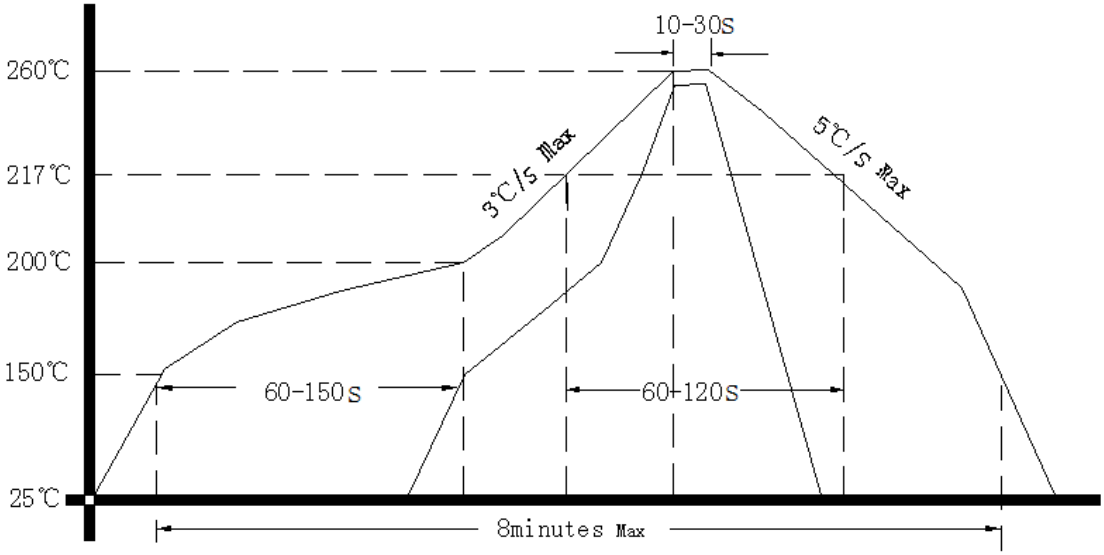
3. Test Circuit



4. Reflow Soldering Curve (RoHS)



5. Package (mm)