Customer Code : _____

DATASHEET

DAPU P/N: **O54A-P445-10.00MHz**

Customer P/N: _____

DAPU			Customer Approval
Drew	Audited	Approved	
Amway.wei	Carry . Wang	James.Liu	
Date: 2016.11.25			Stamp, please! Thanks!

Guangdong Dapu Telecom Technology Co.,Ltd

Bldg13-16,.N.Ind.Zone,SSL Industry Park, Dongguan City, Guangdong Province, China

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

Bldg 16,.N.Ind.Zone,SSL Industry Park,
Dongguan City, Guangdong Province,
PR 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	2016.11.25

Bldg 16,.N.Ind.Zone,SSL Industry Park,
Dongguan City, Guangdong Province,
PR China
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1. Electrical Parameters

MODEL： O54A-P445-10.00MHz						
Item	Description	Parameters			Unit	Test Condition
		Min.	Typ.	Max.		
Output	Frequency		10.00		MHz	
	Output Waveform		Sine wave			
	Level	5			dBm	
	Load		50		Ω	
	Harmonics Suppression			-30	dBc	
	Spurious Suppression			-80	dBc	
Frequency Stabilities	Frequency Tolerance vs. Operating Temperature Range	-0.5		+0.5	$\times 10^{-9}$	T_A varied from-40℃ to 85℃, measurement referenced to frequency observed with $f_{ref}=(f_{max}+f_{min})/2$,$V_{cc}$=12.0V,$V_c$=2.5V, O_{load}=50Ω, 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, V_c=2.5V, and after 15 minutes of operation, within 30 days after ex-works.
	Frequency Tolerance vs. Supply Voltage	-0.1		+0.1	$\times 10^{-9}$	measurement referenced to frequency observed T_A=25℃, V_{cc} varied from 11.4V to 12.6V, V_c=2.5V, O_{load}=50Ω.
	Frequency Tolerance vs. Load	-0.1		+0.1	$\times 10^{-9}$	5% load change measurement referenced to frequency observed with T_A=25℃,V_{cc}=12.0V, V_c=2.5V,and O_{Load}=50Ω.
	Short-Term Stability Allan Variance			0.003	$\times 10^{-9}$	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, V_c=2.5V,and after 30 days of operation.
	Aging Tolerance 1 Year	-0.02		+0.02	$\times 10^{-6}$	
	Aging Tolerance 10 Year	-0.2		+0.2	$\times 10^{-6}$	
Power Supply	Supply Voltage	11.4	12.0	12.6	V	
	Steady Consumption			250	mA	@25℃
	Warm up current			700	mA	
	Warm-Up Time			10	min	@25℃within $\pm 0.01\times 10^{-6}$ of final frequency with reference after 1 hour on.

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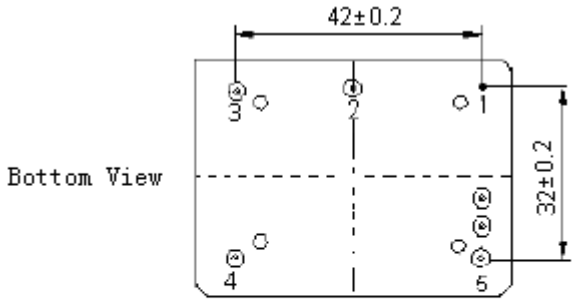
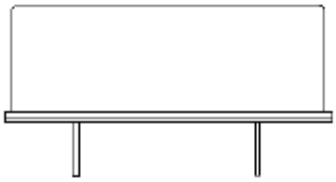
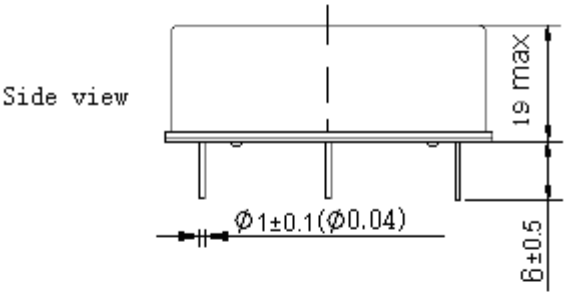
Voltage Control Characteristics	Frequency Tuning Range	-0.5		-0.3	$\times 10^{-6}$	V_c=0V. measurement referenced to V_c=2.5V
		-0.05		+0.05	$\times 10^{-6}$	V_c=2.5V. measurement referenced to exactly 10.00MHz
		+0.3		+0.5	$\times 10^{-6}$	V_c=5.0V. measurement referenced to V_c=2.5V
	Linearity			10	%	
	Slope	Positive				
	Input Impedance	100			KΩ	
Phase Noise	Phase Noise		-100	-90	dBc/Hz	1Hz
			-130	-120		10Hz
			-145	-135		100Hz
			-150	-145		1KHz
			-150	-145		10KHz
			-150	-145		100KHz
			-150	-145		1MHz
Environmental Conditions	Operable Temperature	-40		+85	℃	
	Storage Temperature	-40		+85	℃	
	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.				
	Random Vibration	Compliant to GJB360A, method 214, A of test condition I, 50Hz-2000Hz,acceleration spectral density 2$(m/s^2)^2$/Hz, total root-mean-square acceleration magnitude 53.5m/s^2, test time: 5 minutes for each direction, total time 15 minutes.				
	Shock	Compliant to GJB360A, method 213, test condition B, peak value 750 m/s^2 nominal, pulse time 6ms, 3 times each direction.				
	Terminals Strength	Compliant to GJB360A, test method 211. Test condition A, load 10N.				
Full Package Storage	Relative humidity (%)	20%～70%				
	Temperature (℃)	-10~35℃				

2. Mechanical Structure (mm)

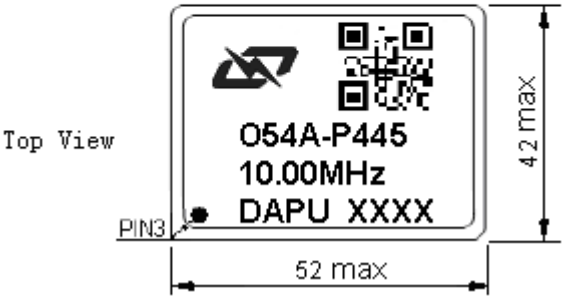






PIN FUNCTION

PIN	NOTATION	FUNCTION
1	GND	GND
2	VC	Control Voltage
3	VREF	Reference Voltage 5V
4	VCC	Supply Voltage
5	OUTPUT	RF Output



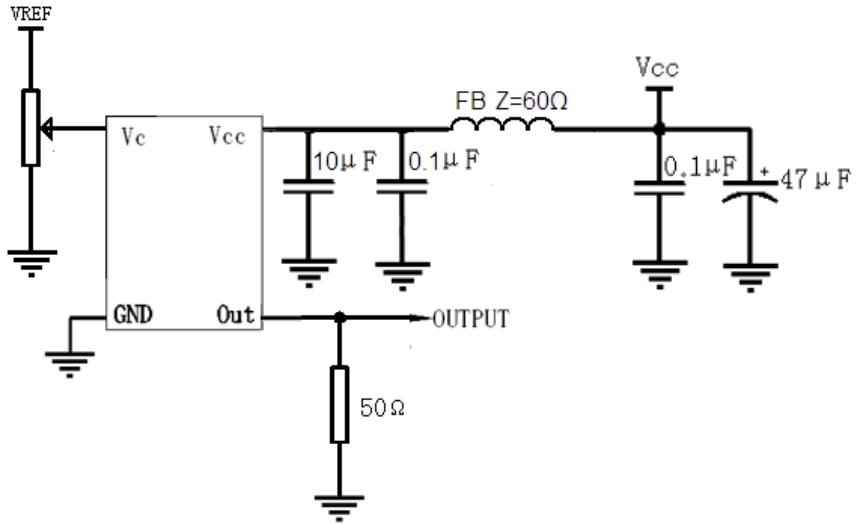
Note1: Tolerance ±0.20mm without mark

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

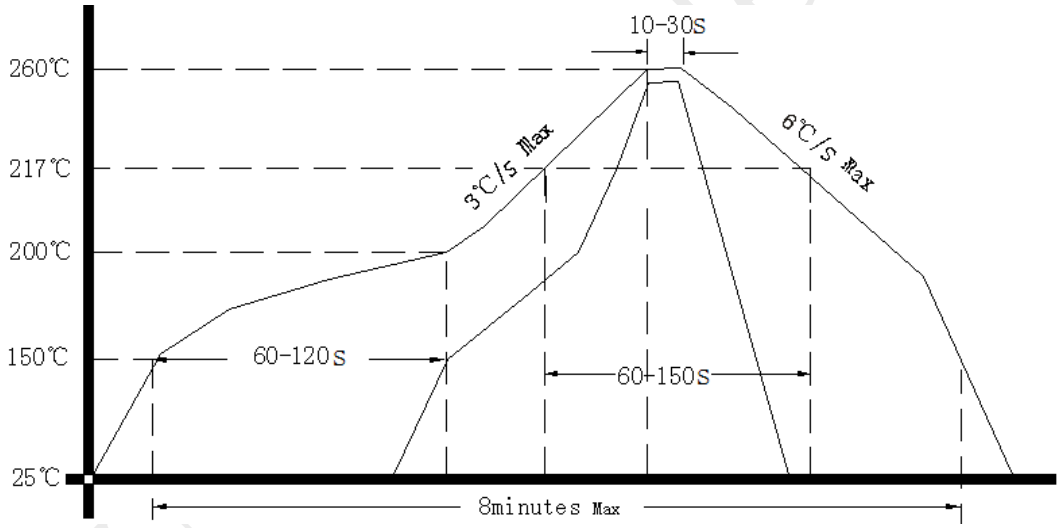
Note3: Referential weight 78g

Note4: NC is not connect

3. Test Circuit



4. Reflow Soldering Curve (RoHS)



5. Package (mm)