Customer Code : _____

DATASHEET

DAPU P/N: **M936-I313-38.40MHz**

Customer P/N: _____

DAPU			Customer Approval
Drew	Audited	Approved	
Amway.wei	Carry.Wang	James.Liu	
Date: 2019.09.17			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

Bldg13-16,.N.Ind.Zone,SSL Industry Park, Dongguan City, Guangdong Province, PRC 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	2019.09.03
1.1	The“Mechanical Structure”changed	Amway	2019.09.17

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1. Electrical Parameters

MODEL： M936-I313-38.40MHz						
Item	Description	Parameters			Unit	Test Condition
		Min.	Typ.	Max.		
Output	Frequency		38.40		MHz	
	Output Waveform		LVCMOS			
	Logic “1” Output Level	2.97			V	V_{cc}=3.3V, O_{load}=15 pF
	Logic “0” Output Level			0.4	V	V_{cc}=3.3V, O_{load}=15 pF
	Start up time		2	3	s	
Frequency Stabilities	Frequency Tolerance vs. Operating Temperature Range	-0.28		+0.28	$\times 10^{-6}$	T_A varied from-40℃to 85℃, measurement referenced to frequency observed with $f_{ref}=(f_{max}+f_{min})/2$, V_{cc}=3.3V, V_c=1.65V, O_{load}=15pF, 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}=3.3V, V_c=1.65V 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℃, V_{cc} varied from 3.13V to 3.47V, V_c=1.65V and O_{Load}=15pF .
	Phase Jitter		200		fs	12Hz to 20MHz
	Aging Tolerance 1 Year	-1		+1	$\times 10^{-6}$	T_A=25℃, V_{cc}=3.3V, V_c=1.65V and after 1h of operation.
	Aging Tolerance 10 Year	-3		+3	$\times 10^{-6}$	
Power Supply	Input Current			50	mA	@25℃, V_{cc}=3.3V, V_c=1.65V, O_{load}=15pF.
	Supply Voltage	3.13	3.3	3.47	V	

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Voltage Control Characteristics	Supply Voltage	0		3.3	V	
	APR	±5			$\times 10^{-6}$	
	Linearity	-10		+10	%	
	Deviation Slope	Monotonic Positive				
	Input Impedance	10			KΩ	
Phase Noise	Phase Noise			-80	dBc/Hz	10Hz
				-104		100Hz
				-139		1KHz
				-149		10KHz
				-162		100KHz
				-164		1MHz
Environmental Conditions	Operable Temperature	-40		+85	℃	
	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	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 (℃)	-10~35℃				

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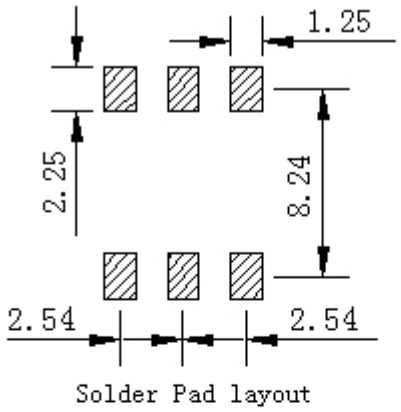
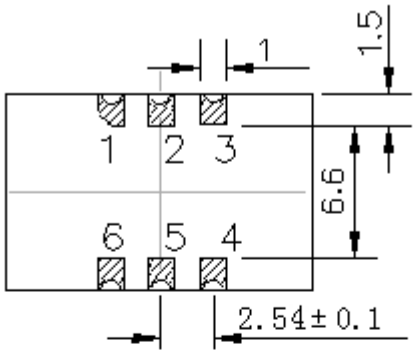
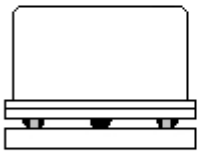
2. Mechanical Structure(mm)

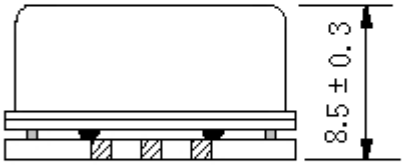


Solder Pad layout



Bottom view

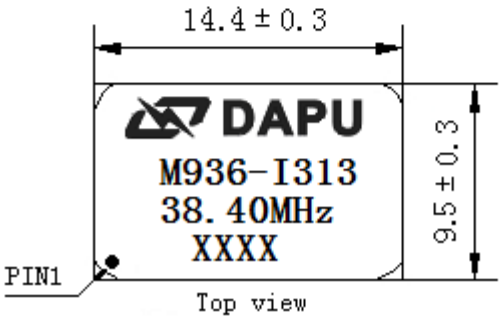

Right view



Side view

PIN FUNCTION

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



Top view

Note1: Tolerance ±0.2mm without mark

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

Note3: Referential weight 2.0g

Note4: NC is not connect

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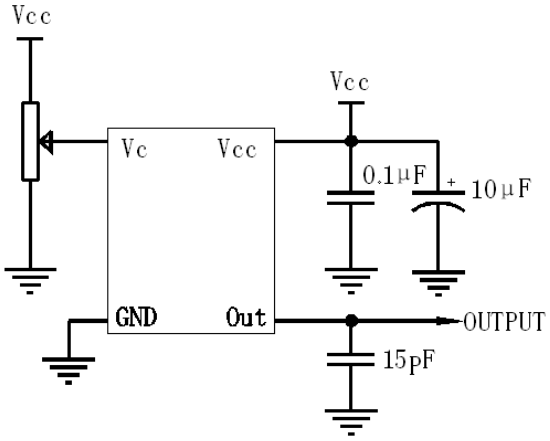
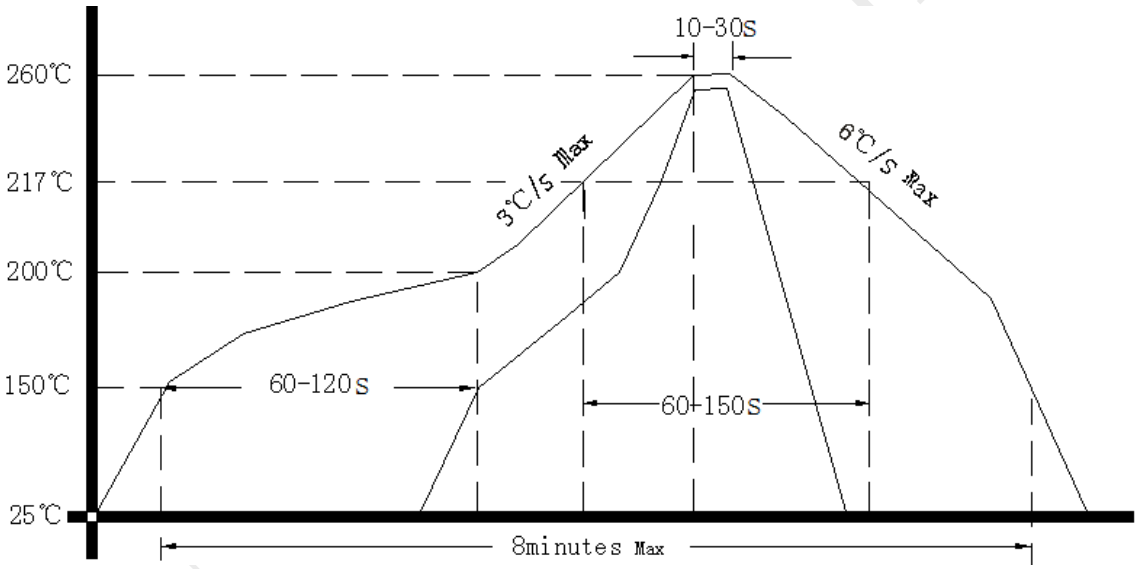
3. Test circuit



4. Reflow Soldering Curve (RoHS)



5. Package: Tape & Reel (mm)