Travelling Merchant:_____

DATASHEET

Standard: **O23B-B345-10.00MHz**

P/N: _____

Plot			The Label
Drew	Audited	Approved	Stamp, please! Thanks!
Amway.wei	Tony · Wang	James.Liu	
Date: 2019.05.13			

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	2019.05.13

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1. Electrical Parameters

MODEL： O23B-B345-10.00MHz						
Item	Description	Parameters			Unit	Test Condition
		Min.	Typ.	Max.		
Output	Frequency		10.00		MHz	
	Output Waveform		HCMOS			
	Output Low Voltage			0.4	V	V_{cc}=12.0V, O_{load}=15pF
	Output High Voltage	2.7			V	V_{cc}=12.0V, O_{load}=15pF
	Duty Cycle	45	50	55	%	@50%
	Rise / Fall Time (10%~90%)			7	ns	
	Load		15		pF	
Frequency Stabilities	Frequency Tolerance vs. Operating Temperature Range	-1		+1	$\times 10^{-9}$	T_A varied from -30℃ to 75℃, measurement referenced to frequency observed with T_A = 25℃, V_{cc}=12.0V, V_c=2.5V, 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, V_c=2.5V, and after 15 minutes of operation, within 30 days after ex-works.
	Frequency Tolerance vs. Supply Voltage	-0.5		+0.5	$\times 10^{-9}$	measurement referenced to frequency observed T_A=25℃, V_{cc} varied from 11.4V to 12.6V, V_c =2.5V and O_{Load}=15pF.
	Frequency Tolerance vs. Load	-0.5		+0.5	$\times 10^{-9}$	5% load change measurement referenced to frequency observed with T_A= 25℃, V_{cc}=12.0V, V_c=2.5V, and O_{Load}=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	-0.3		+0.3	$\times 10^{-9}$	V_{cc}, V_c, 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	-0.03		+0.03	$\times 10^{-6}$	
Power Supply	Supply Voltage	11.4	12.0	12.6	V	
	Steady Consumption			250	mA	@25℃
	Warm up current			500	mA	

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Voltage Control Characteristics	Frequency Tuning Range	-0.5		-0.3	$\times 10^{-6}$	V_c= 0 V. 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		-120	-110	dBc/Hz	10Hz
			-145	-135		100Hz
			-150	-145		1KHz
			-150	-145		10KHz
			-150	-145		100KHz
			-150	-145		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	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.				

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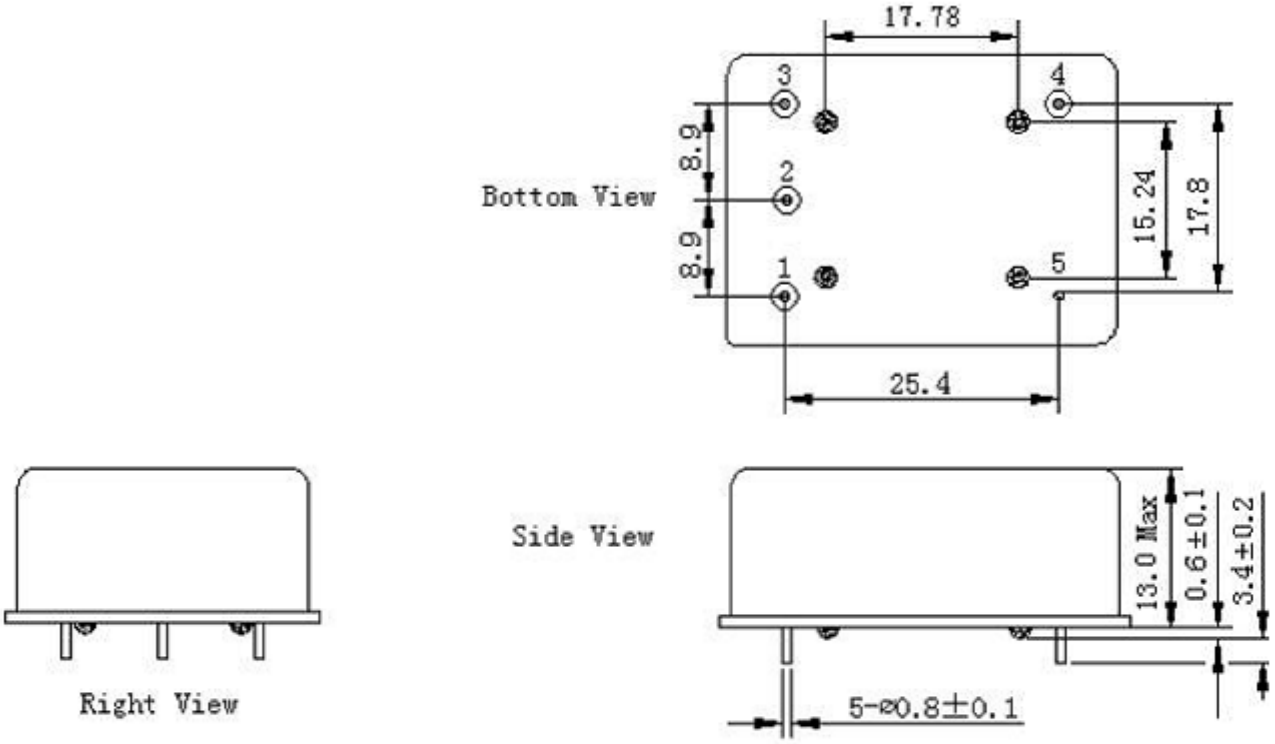
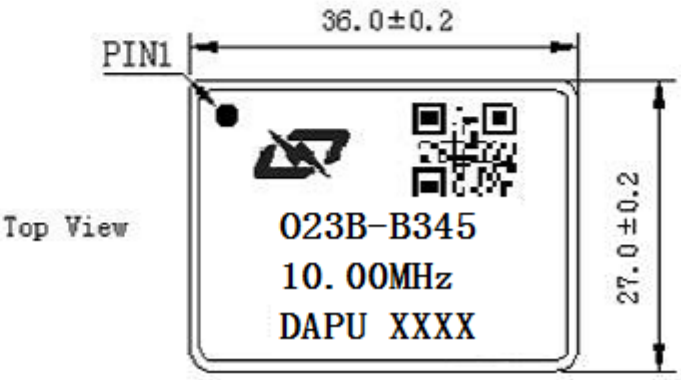
2. Mechanical Structure (mm)



PIN FUNCTION

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



Note1: Tolerance ±0.2mm without mark
Note2: Referential Weight 21g
Note3: NC is not connect

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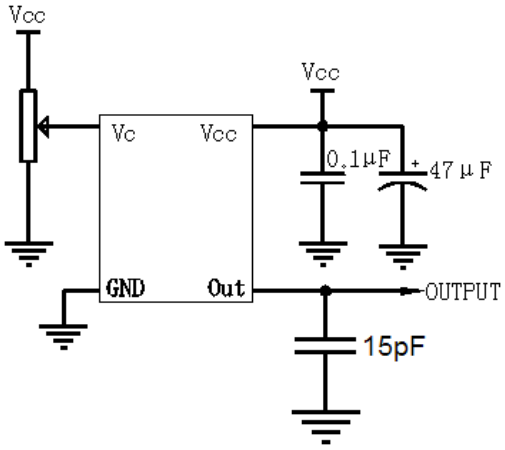
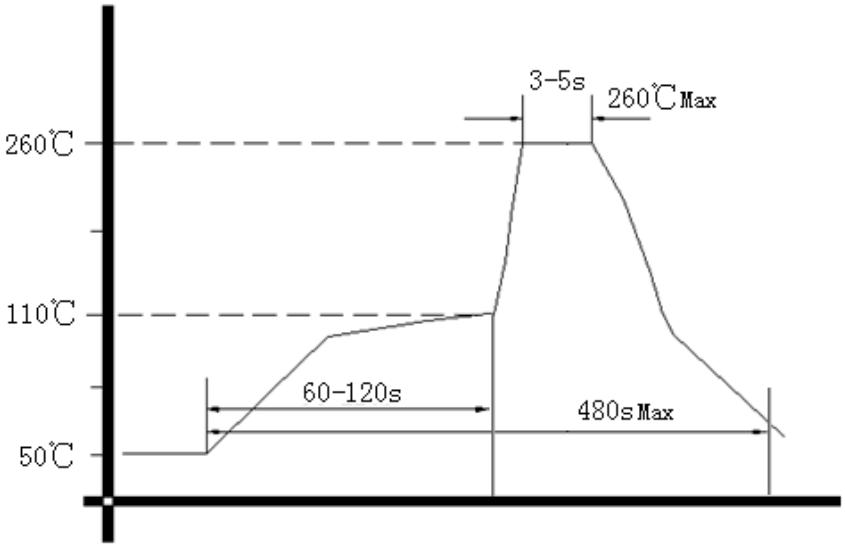
3. Test Circuit



4. Wave Soldering Curve (RoHS)



5. Package（mm）