Customer Code : _____

DATASHEET

DAPU P/N: **R55A-10.00MHz**

Customer P/N: _____

DAPU			Customer Approval
Drew	Audited	Approved	Stamp, please! Thanks!
Amway.wei	Tony · Wang	James.Liu	
Date: 2015.09.07			

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	2015.09.07

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1. Electrical Parameters

MODEL：R55A -10.00MHz						
Item	Description	Parameters			Unit	Test Condition
		Min.	Typ.	Max.		
Output	Frequency		10.00		MHz	
	Output Waveform		HCMOS			
	Output Low Voltage			0.5	V	V_{cc}=5.0V, O_{load}=15pF
	Output High Voltage	2.7			V	V_{cc}=5.0V, O_{load}=15pF
	Duty Cycle	40	50	60	%	@50%
	Rise / Fall Time (10%~90%)			10	ns	
	Load		15		pF	
	Non-Harmonics			-85	dBc	
Frequency Stabilities	Frequency Tolerance vs. Operating Temperature Range	-0.05		+0.05	$\times 10^{-9}$	T_A varied from -10℃ to 75℃, measurement referenced to frequency observed with $f_{ref}=(f_{max}+f_{min})/2$, V_{cc}=5.0V, O_{load}=15pF, temperature variable speed less than 2℃per minute.
	Initial Frequency Tolerance	-2		+2	$\times 10^{-9}$	Measurement referenced to frequency observed with T_A=25℃, V_{cc}=5.0V, V_c=2.5V and after 15 minutes of operation at shipment.
	Short-Term Stability: Allan Variance			0.005	$\times 10^{-9}$	Temperature stability, no EMI\EMC or other interference， test after power for 1hour ref. to 25℃; 1s, using PN9000 equipment.
	Retrace	-0.5		+0.5	$\times 10^{-9}$	@25℃, frequency variation measured after 24 hours on , 24hours power off and 24 hours power on.
	Aging Tolerance per day	-0.04		+0.04	$\times 10^{-9}$	V_{cc},T_A constant Measurement referenced to frequency observed with T_A=25℃,V_{cc}=5.0V, O_{load}=15pF, and after 30 days of operation.
	Aging Tolerance 1 Month	-0.3		+0.3	$\times 10^{-9}$	
	Aging Tolerance 1 Year	-1.5		+1.5	$\times 10^{-9}$	
Power Supply	Supply Voltage	4.75	5.0	5.25	V	
	Current Consumption			600	mA	@25℃
	Warm up current			1200	mA	
	Warm-up Time			60	min	@25℃ within $\pm 0.5\times 10^{-9}$ of final frequency with reference after 24 hour on.
	Voltage Coefficient			0.02	$\times 10^{-9}$	5.0V ±5% , $f_{pk-pk}=(f_{max}-f_{min})/f_0$.

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Voltage Control Characteristics	Frequency Tuning Range	-0.3		-0.15	$\times 10^{-6}$	V_c=0V. measurement referenced to V_c=2.5V.
		-2		+2	$\times 10^{-9}$	V_c=2.5V. measurement referenced to exactly 10.00MHz.
		+0.15		+0.3	$\times 10^{-6}$	V_c=5.0V. measurement referenced to V_c=2.5V.
	Linearity			10	%	
	Slope	Positive				
	Input Impedance	100			KΩ	
Phase Noise	Phase Noise @25℃		-100	-90	dBc/Hz	1Hz
			-130	-120		10Hz
			-145	-135		100Hz
			-150	-145		1KHz
			-150	-145		10KHz
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.				
Full Package Storage	Relative humidity (%)	20%～70%				
	Temperature (℃)	-10~35℃				

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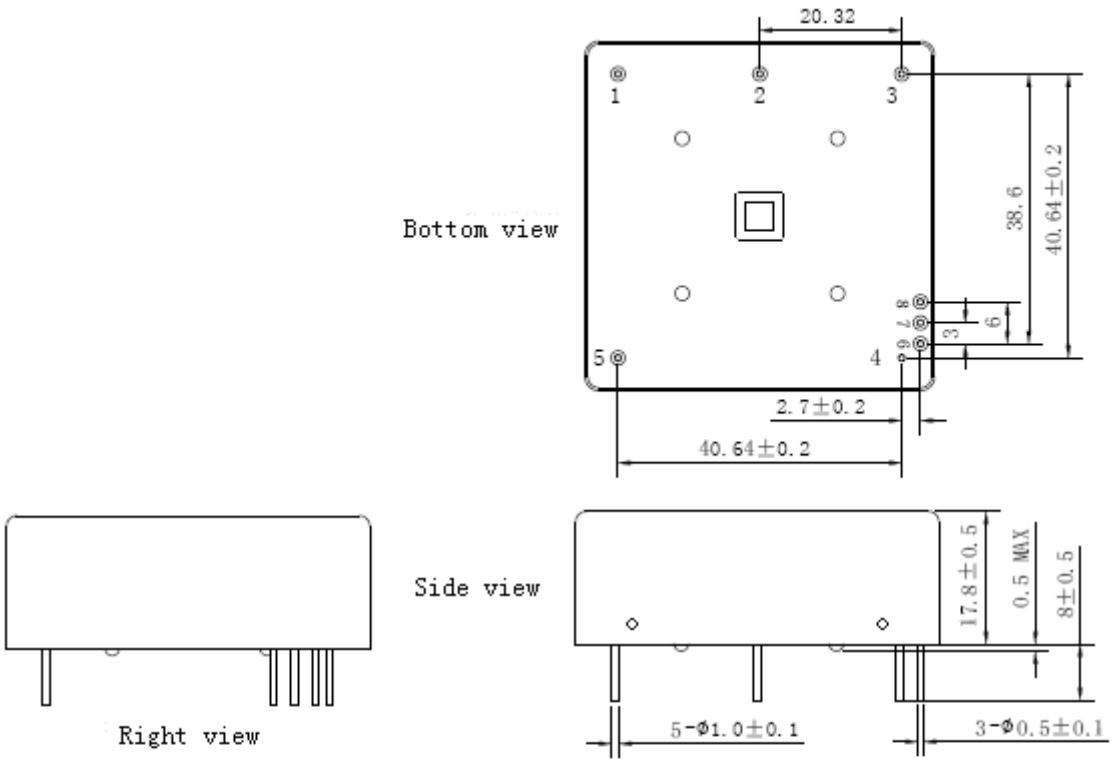
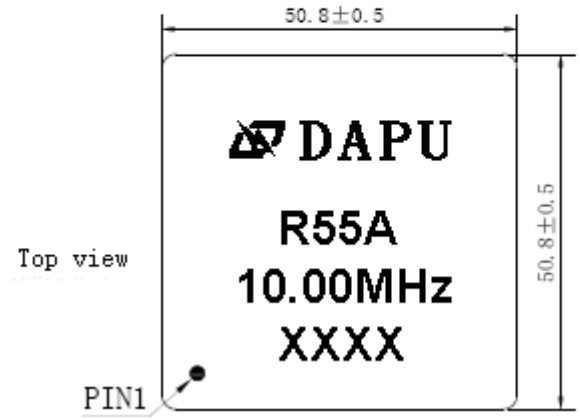
2. Mechanical Structure (mm)



PIN FUNCTION

PIN	FUNCTION
1	Control Voltage
2	Baseplate Ground
3	Output
4	GND
5	Supply Voltage
6	BITE
7	RS232 transmit[Tx]
8	RS232 receive[Rx]

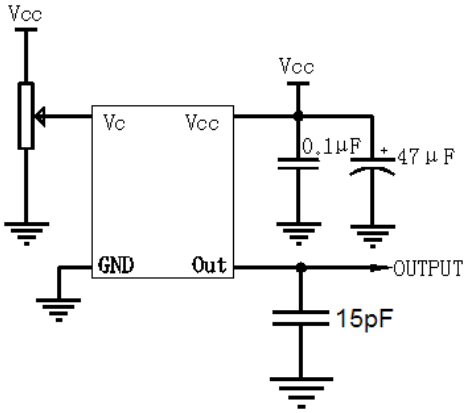


Note1: Tolerance ±0.20mm without mark

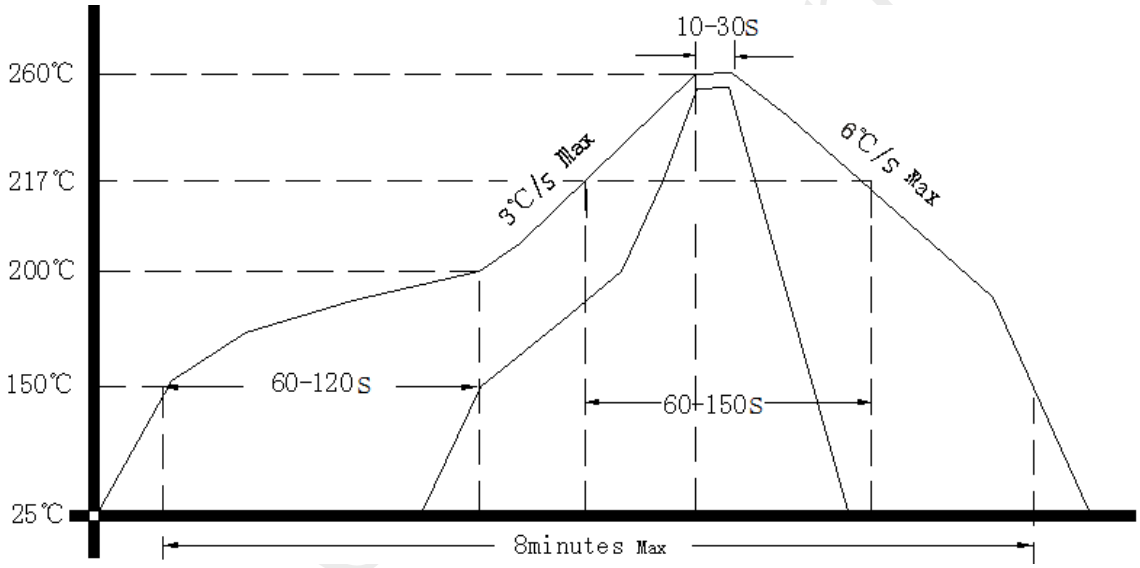
Note2: The first two xx representative: week
After two xx representative: year

Note3: Referential Weight 56.1g

3. Test Circuit



4. Reflow Soldering Curve (RoHS)



5. Package(mm)