



1. Electrical Parameters

MODEL: T11A-0803-10.00MHz						
Item	Description	Parameters			Unit	Test Condition
		Min.	Typ.	Max.		
Output	Frequency	10.00			MHz	
	Output Waveform	LVCMOS				
	Output Low Voltage			0.5	V	$V_{cc}=5.0V, O_{load}=30pF$
	Output High Voltage	2.8		3.3	V	$V_{cc}=5.0V, O_{load}=30pF$
	Duty Cycle	45	50	55	%	@50%
	Rise / Fall Time (10%~90%)			5	ns	
	Load			30	pF	
Frequency Stabilities	Frequency Tolerance vs. Operating Temperature Range	-0.28		+0.28	$\times 10^{-6}$	T_A varied from $-40^{\circ}C$ to $85^{\circ}C$, measurement referenced to frequency observed with $T_A=25^{\circ}C, V_{cc}=5.0V, V_c=2.5V, O_{load}=30pF$, temperature variable speed less than $2^{\circ}C$ per minute.
	Initial Frequency Tolerance	-1		+1	$\times 10^{-6}$	Measurement referenced to frequency observed with $T_A=25^{\circ}C \pm 2^{\circ}C, V_c=2.5V$, within 30 days after ex-works.
	Frequency Tolerance vs. Supply Voltage	-0.2		+0.2	$\times 10^{-6}$	measurement referenced to frequency observed $T_A=25^{\circ}C, V_{cc}$ varied from 4.75V to 5.25V, $V_c=2.5V$, and $O_{Load}=30pF$.
	Frequency Tolerance vs. Load	-0.2		+0.2	$\times 10^{-6}$	$30 pF \pm 10\%, T_A=25^{\circ}C, V_{cc}=5.0V, V_c=2.5V$.
	Aging Tolerance 1 Year	-1		+1	$\times 10^{-6}$	The average environmental temperature $40^{\circ}C$.
	Aging Tolerance 10 Years	-3		+3	$\times 10^{-6}$	
Power Supply	Current Consumption			20	mA	@ $25^{\circ}C \pm 2^{\circ}C, V_{cc}=5.0V$.
	Supply Voltage	4.75	5.0	5.25	V	

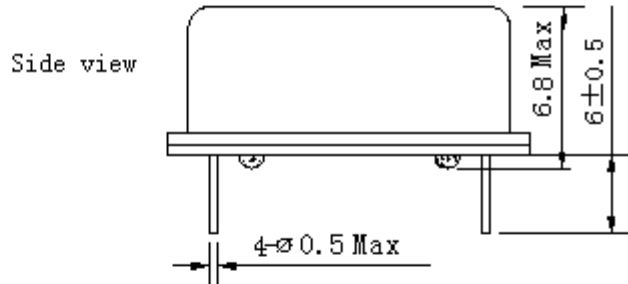
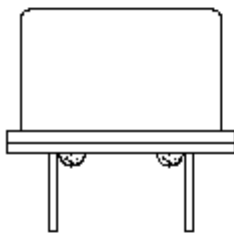
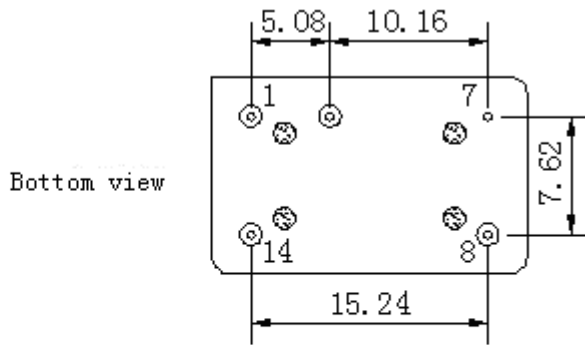


Voltage Control Characteristics	Frequency Tuning Range	-10		-5	$\times 10^{-6}$	$V_c=0V$. measurement referenced to $V_c=2.5V$
		-1		+1	$\times 10^{-6}$	$V_c=2.5V$. measurement referenced to exactly 10.00MHz
		+5		+10	$\times 10^{-6}$	$V_c=5.0$. measurement referenced to $V_c=2.5V$
	APR Absolute Pull Range	-11		-4	$\times 10^{-6}$	$V_c=0V$. reference to f_0 at time of shipment, 25°C.
		+4		+11	$\times 10^{-6}$	$V_c=5.0V$. referenced to f_0 at time of shipment, 25°C.
	Linearity	-10		+10	%	
	Slope	Positive				
Input Impedance	100			K Ω		
Phase Jitter	Phase Jitter			1	ps	RMS (12K~1M)
Phase Noise	Phase Noise		-90		dBc/Hz	10Hz
			-110			100Hz
			-130			1KHz
			-140			10KHz
			-145			100KHz
Environmental Conditions	Operable Temperature	-40		+85	°C	
	Storage Temperature	-55		+125	°C	
	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 1.				
	Bump	400m/s ² ; 6ms; (4000±10 times for each 3 directions X , Y , Z) .IEC 60068-2-29 Test Eb.				
	Vibration	Test Condition: 0.75mm ; 10Hz~55Hz, one cycle per 30 min. (each 3 directions X , Y , Z) .IEC 60068-2-06 Test Fc.				
	Shock	1000 m/s ² ; 6ms; half sine wave (3 times for each 6 directions X , Y , Z),IEC 60068-2-27 Test Ea.				
	Drop	IEC60068-2-32 Test Ed.				
After test, all specifications still meet the requirements.						
Producibility	Solderability	Test temperature : 260°C , lasts for 5 seconds.				
	Resistant To Soldering Heat	Temperature :260°C, > 10 seconds, 4 times reflow.				
	Tension	10N				
	Thrust: 2N	2N				



Full Package Storage	Relative humidity (%)	20%~70%
	Temperature (°C)	-10~35°C

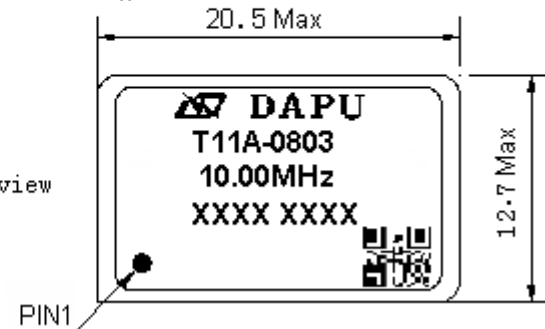
2. Mechanical Structure(mm)



PIN FUNCTION

PIN	NOTATION	FUNCTION
1	VC	Control Voltage
7	GND	GND
8	OUTPUT	RF Output
14	VCC	Supply Voltage

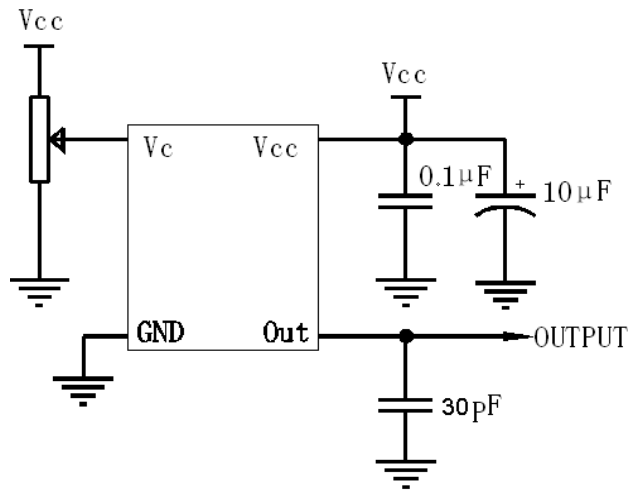
Top view



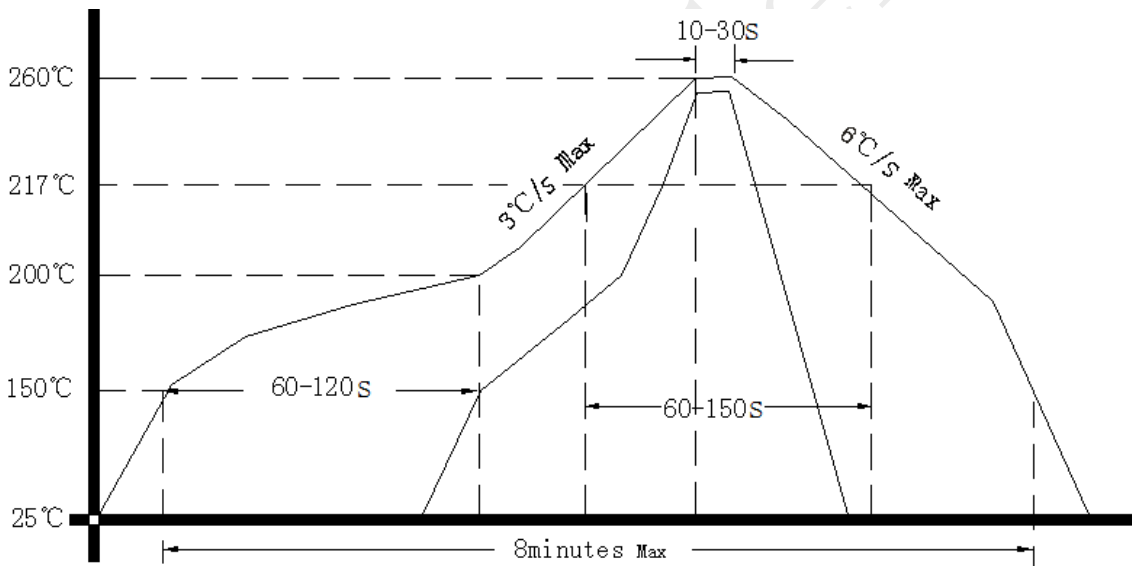
- Note1:** Tolerance $\pm 0.20\text{mm}$ without mark
- Note2:** The first two xx representative: week
After two xx representative: year
At last four xxxx representative: serial number
- Note3:** Referential weight 3.8g
- Note4:** Material composition and coating :
Pad/terminals: Fe-Co-Ni Alloy; Nickel Plating
Base: Fe
Cover: Stainless steel; Nickel Plating



3. Test circuit



4. Reflow Soldering Curve (RoHS)



5. Package: PVC Tube,10pcs (mm)

