

Travelling Merchant: _____

DATASHEET

Standard: **M11A-M425-20.00MHz-A**

P/N: _____

Plot			The Label
Drew	Audited	Approved	Stamp, please! Thanks!
Date: 2023.10.16			

Guangdong Dapu Telecom Technology Co.,Ltd

Building 5, No.24, Industrial East Road, Songshanhu Park, Dongguan, Guangdong, P.R. China

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



Table of amendment

Version	Revision contents	Prepared by	Revised date
1.0	The first issued	<i>Amway</i>	2023.10.16



1. Electrical Parameters

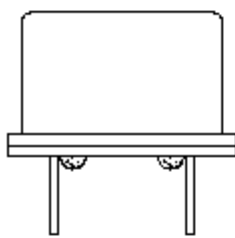
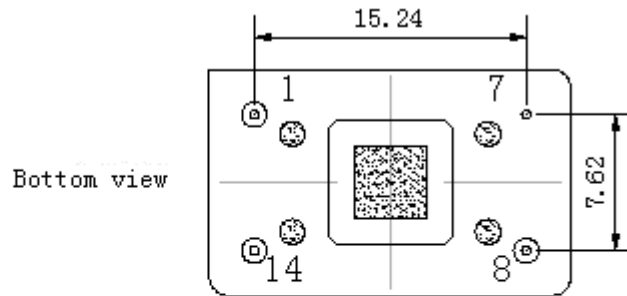
MODEL: M11A-M425-20.00MHz-A						
Item	Description	Parameters			Unit	Test Condition
		Min.	Typ.	Max.		
Output	Frequency	20.00			MHz	
	Output Waveform	Sine Wave				
	Level	6			dBm	
	Harmonics Suppression			-40	dBc	
	Spurious Suppression			-60	dBc	
	Load	50			Ω	
Frequency Stabilities	Frequency Tolerance vs. Operating Temperature Range	-0.5		+0.5	$\times 10^{-6}$	T_A varied from -55°C to 85°C , measurement referenced to frequency observed with $T_A=25^\circ\text{C}$, $V_{cc}=5.0\text{V}$, $V_c=2.5\text{V}$, $O_{load}=50\Omega$, temperature variable speed less than 2°C per minute.
	Initial Frequency Tolerance	-0.5		+0.5	$\times 10^{-6}$	Measurement referenced to frequency observed with $T_A=25^\circ\text{C}$, $V_{cc}=5.0\text{V}$, $V_c=2.5\text{V}$ within 30 days after ex-works.
	Frequency Tolerance vs. Supply Voltage	-0.1		+0.1	$\times 10^{-6}$	measurement referenced to frequency observed $T_A=25^\circ\text{C}$, V_{cc} varied from 4.75V to 5.25V, $V_c=2.5\text{V}$ and $O_{Load}=50\Omega$.
	Frequency Tolerance vs. Load	-0.1		+0.1	$\times 10^{-6}$	5% load change measurement referenced to frequency observed with $T_A=25^\circ\text{C}$, $V_{cc}=5.0\text{V}$, $V_c=2.5\text{V}$, $O_{Load}=50\Omega$.
	Aging Tolerance Per Day	-0.02		+0.02	$\times 10^{-6}$	$T_A=25^\circ\text{C}$, $V_{cc}=5.0\text{V}$, $V_c=2.5\text{V}$ and after 1h of operation.
	Aging Tolerance 1 Year	-1		+1	$\times 10^{-6}$	
Power Supply	Current Consumption			100	mA	@ 25°C , $V_{cc}=5.0\text{V}$, $V_c=2.5\text{V}$, $O_{load}=50\Omega$.
	Supply Voltage	4.75	5.0	5.25	V	



Voltage Control Characteristics	Frequency Tuning Range			-8	$\times 10^{-6}$	$V_c=0V$. measurement referenced to $V_c=2.5V$
		-0.5		+0.5	$\times 10^{-6}$	$V_c=2.5V$. measurement referenced to exactly 20.00MHz
		+8			$\times 10^{-6}$	$V_c=5.0V$. measurement referenced to $V_c=2.5V$
	Linearity			10	%	
	Slope	Positive				
	Input Impedance	100				K Ω
Phase Noise	Phase Noise @25°C		-90	-85	dBc/Hz	10Hz
			-118	-113		100Hz
			-140	-135		1KHz
			-150	-145		10KHz
			-150	-145		100KHz
			-150	-145		1MHz
Environmental Conditions	Operable Temperature	-55		+85	°C	
	Storage Temperature	-55		+105	°C	
	ESD Level	Human Body Model,class2: 2000V to 4000V; ANSI/ESDA/JEDEC JS-001-2010.				
		Machine Model, class B: 200V to 400V; JEDEC JESD22-A115C.				
	Moisture Sensitivity Level	Not humidity sensitive.				
	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 68-2009 Test Fc.				
Shock	100g; 6ms; half sine wave (3 times for each 3 directions X ,Y , Z),IEC 68-2009 Test Ea/Severity 50A.					

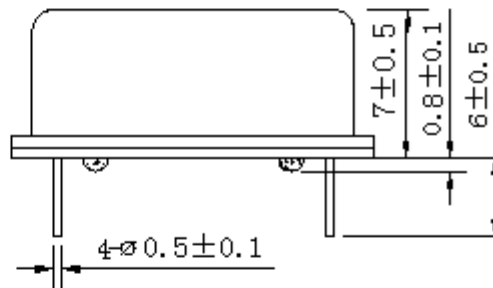


2. Mechanical Structure(mm)



Right view

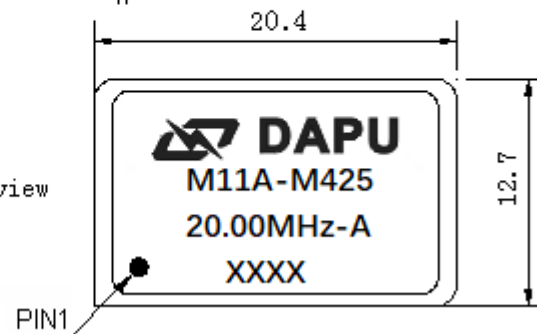
Side view



PIN FUNCTION

PIN	FUNCTION
1	VC
7	GND
8	OUTPUT
14	VCC

Top view



Note1: Tolerance ± 0.2 mm without mark

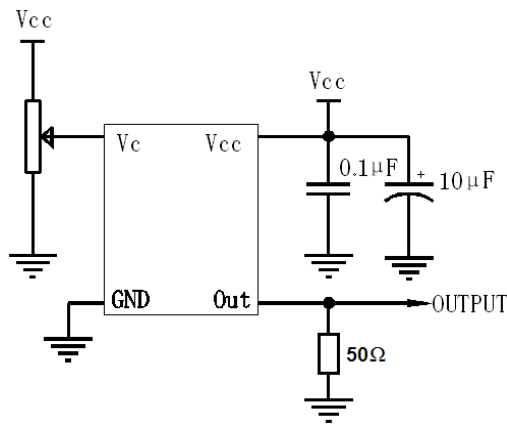
Note2: Referential Weight 3.8g

Note3: NC is not connect

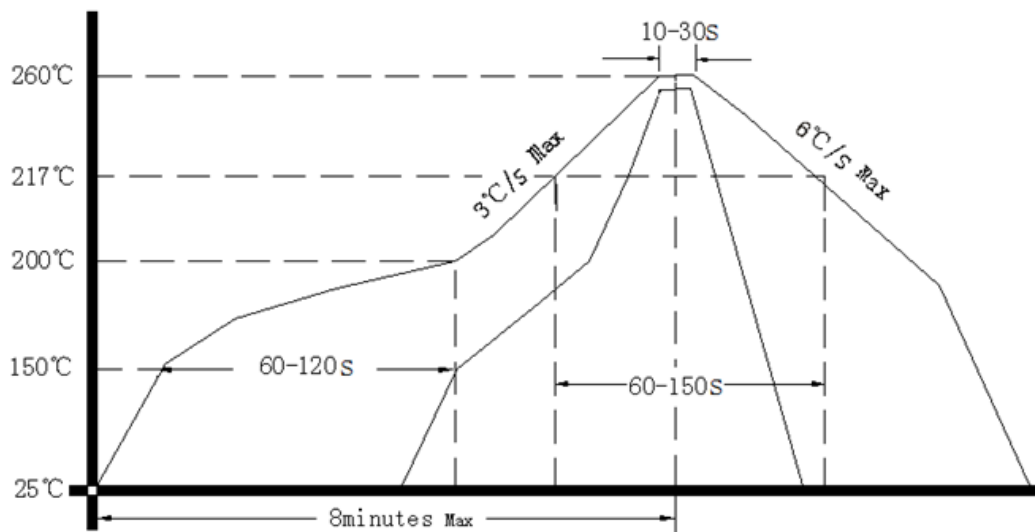
Note4: The first two xx representative: week
After two xx representative: year



3. Test circuit



4. Reflow Soldering Curve (RoHS)



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

