Travelling Merchant:_____

DATASHEET

Standard: **T32-Q513-10.00MHz**

P/N: **TC-0002**

Plot			The Label
Drew	Audited	Approved	
Amway.wei	Carry.Wang	Jason Zhao	
Date: 2023.03.10			Stamp, please! Thanks!

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

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	Amway	2009.01.06
1.1	The “Mechanical Structure” changed	Amway	2020.03.09
1.2	The “Frequency tuning range” changed	Amway	2020.12.21
1.3	Add “ADEV”	Amway	2023.03.10

Guangdong Dapu Telecom Technology Co., Ltd

http://www.dptel.com

Building 5, No.24, Industrial East Road,
Songshanhu Park, Dongguan,
Guangdong, P.R. China
TEL:0086-0769-88010888
FAX:0086-0769-81800098

1、Electrical Parameters

MODEL：T32-Q513-10.00MHz						
Item	Description	Parameters			Unit	Test Condition
		Min.	Typ.	Max.		
Output	Frequency		10.00		MHz	
	Output Waveform		Clipped Sine Wave			
	Vp-p	0.8			V	
	Load		10KΩ//10pF			
Frequency Stabilities	Frequency Tolerance vs. Operating Temperature Range	-1		+1	$\times 10^{-6}$	T_A varied from -40℃ to 85℃, measurement referenced to frequency observed with T_A= 25℃, V_{cc}= 3.3V, V_c=1.5V, O_{load}=10KΩ//10pF, temperature variable speed less than 2℃per minute.
	Nominal Frequency Tolerance	-1		+1	$\times 10^{-6}$	Measurement referenced to frequency observed with T_A=25℃, V_{cc}=3.3V, V_c=1.5V 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℃, V_{cc} varied from 3.13V to 3.47V, V_c =1.5V and O_{Load}=10KΩ//10pF.
	Frequency Tolerance vs. Load	-0.2		+0.2	$\times 10^{-6}$	5% load change measurement referenced to frequency observed with T_A=25℃, V_{cc}=3.3V, V_c=1.5V and O_{Load}=10KΩ//10pF .
	ADEV			0.3	$\times 10^{-9}$	@1s to 30s
	Aging Tolerance Per Day	-0.02		+0.02	$\times 10^{-6}$	T_A=25℃, V_{cc}=3.3V, V_c=1.5V and after 1h of operation.
	Aging Tolerance 1 Year	-1		+1	$\times 10^{-6}$	
Power Supply	Operating Current			3	mA	@25℃, V_{cc}=3.3V, V_c=1.5V, O_{Load}=10KΩ//10pF.
	Supply Voltage	3.13	3.3	3.47	V	
Voltage Control	Frequency tuning range	-15		-9	$\times 10^{-6}$	V_c= 0.5V. measurement referenced to V_c=1.5V.
		-1		+1	$\times 10^{-6}$	V_c=1.5V. measurement referenced to Exactly 10.00MHz.
		+9		+15	$\times 10^{-6}$	V_c=2.5V. measurement referenced to V_c=1.5V.
	Linearity			10	%	
	Slope		Positive			
	Input Impedance	100			KΩ	

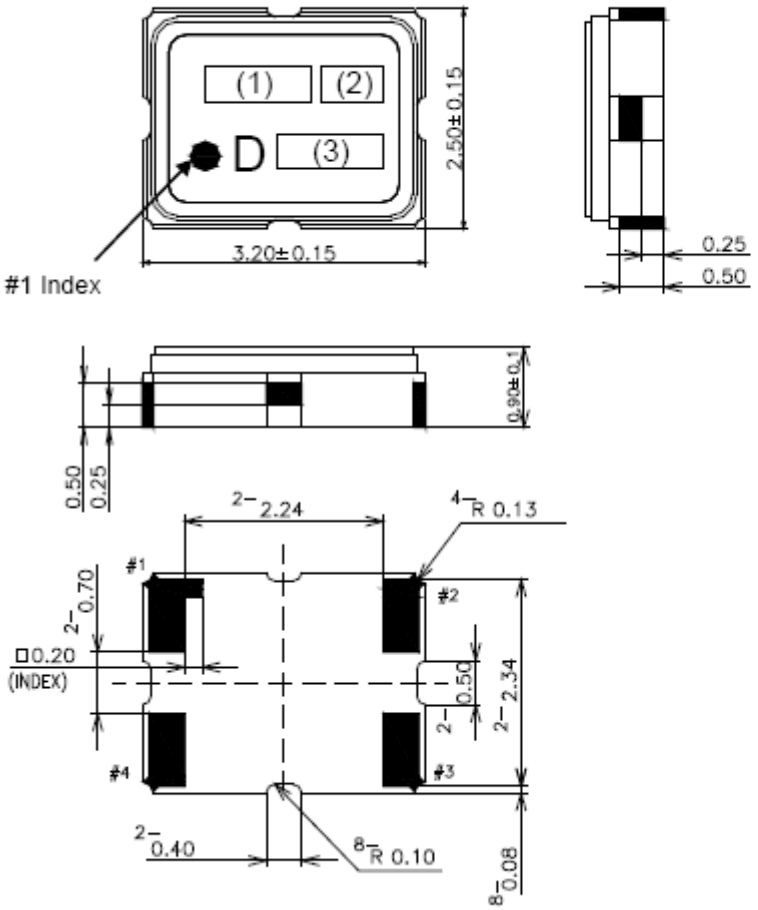
Building 5, No.24, Industrial East Road,
Songshanhu Park, Dongguan,
Guangdong, P.R. China
TEL:0086-0769-88010888
FAX:0086-0769-81800098

Phase Noise	Phase Noise		-95	-90	dBc/Hz	10Hz
			-115	-110		100Hz
			-138	-133		1KHz
			-140	-135		10KHz
			-145	-140		100KHz
			-148	-143		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; JEDEC JESD22-A115C.				
	Moisture Sensitivity Level	Level 1.				
	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.				

Building 5, No.24, Industrial East Road,
Songshanhu Park, Dongguan,
Guangdong, P.R. China
TEL:0086-0769-88010888
FAX:0086-0769-81800098

2、Mechanical Structure(mm)

Outline



Pin Connections

Pin No.	Connection
#1	V_{CONT}
#2	GND
#3	Output
#4	V_{CC}

Marking

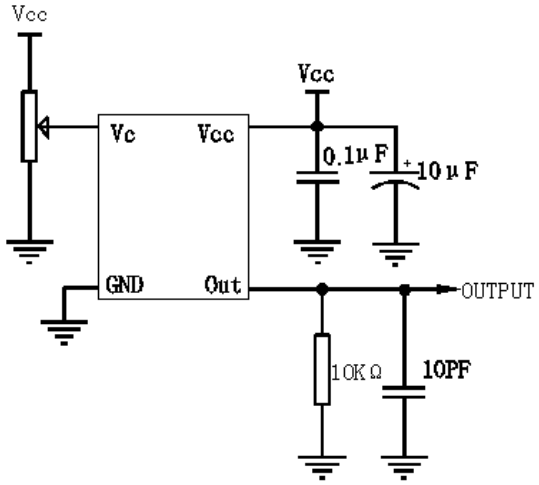
(1) Frequency	10.00 (MHz, 4digits)
(2) Model code	AN
(3) Date code	Year (1digit) +Week (2digits)
	e.g.2017/01/01→ 701

unit: mm

Dimensional Tolerance: ±0.15

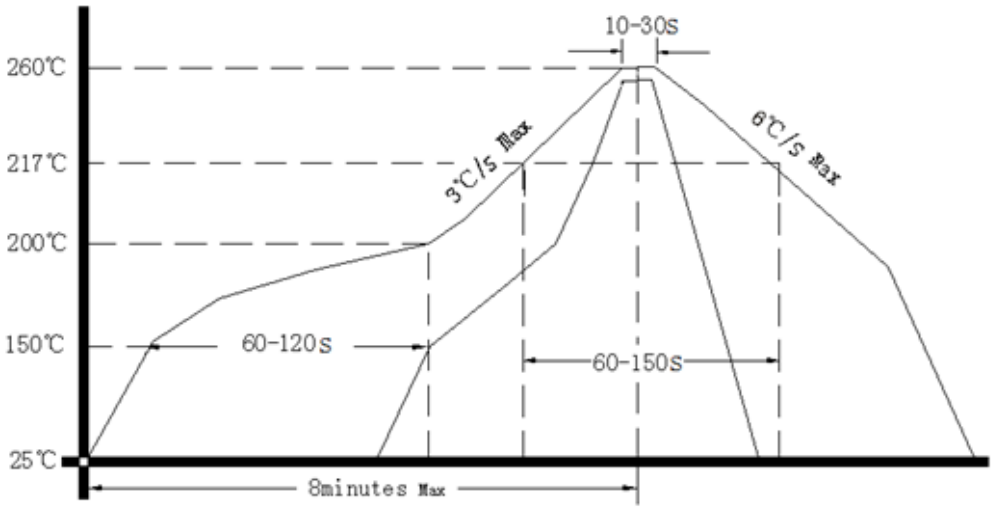
(Unless otherwise noted)

3、Test Circuit



Building 5, No.24, Industrial East Road,
Songshanhu Park, Dongguan,
Guangdong, P.R. China
TEL:0086-0769-88010888
FAX:0086-0769-81800098

4、Reflow Soldering Curve (RoHS)



5、Package: Tape & Reel (mm)