

Crystal Oscillator Specification

SPEC NO.: -181119

Yes

No.

Specification

TO:STE

Model Name: Crystal Oscillator PART NO:OSC8-12.288M-30-5V-E-TS CUSTOMER PART NO.:

Approval sheet:

Approved

Customer's comments are welcomed here.

Pls return this copy as a certificate of your approval by Email.

Approved By

Da	ate:			

STRONG ELECTRONICS&TECHNOLOGY LIMITED

Service Hotline:86-755-84528985 Fax: 86-755-84528986 Email:info@strongfirst.com.cn www.strongfirst.com.cn

Strong Electronics&Technology Limited

www.strongfirst.com.cn



Crystal Oscillator Specification

History Record

Date	Part No.	SPEC No.	Description.	Remarks.
2018-11-17		1	Initial issue	STE
				\times
	\wedge		C	
(-)
			~	
			5	
5				
D. 110.0	ISO9001:2000	Approved by	Check by	Design by
RoHS Compliant Lead free Lead-free soldering	ISO14001:2004	Nov-17-2018	NOV-17-2018	NOV-17-2018
Reversions	Total Page	Xu gang dong	Liu jun	Wang hon

Crystal Oscillator Specification

1. SCOPE

This specification shall cover the characteristics of clock oscillator

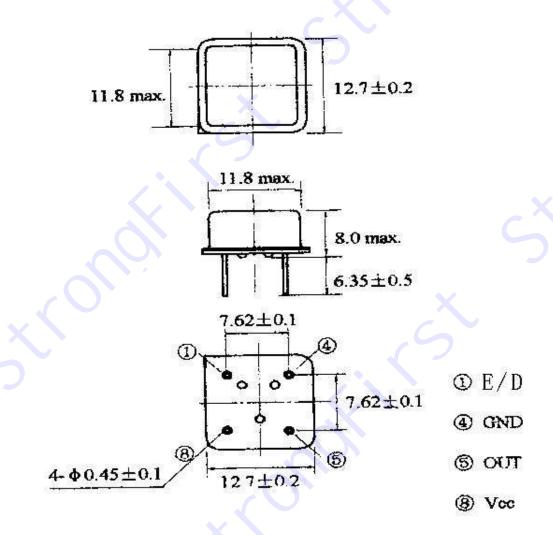
with P/N: OSC8-12.2888M-30-5V-E-TS

2. ELECTRICAL SPECIFICATION

	ITEM	SPECIFICATION	
Package		DIP8 (half size)	
Nominal Fre	quency	12.288MHz	
Frequency T	olerance at 25°C	\pm 30PPM,	
Temperature range		Operating: -40° C to $+85^{\circ}$ C	
		Storage: -55° C to $+105^{\circ}$ C	
Supply Volta	ge	5V	
Input current		30mA	
Output Symmetry		40% to 60%	
>	Rise/fall time	10ns max	
Output load	TTL/HCMOS	CL=15PF or 10TTL	
Aging		+/-3ppm/year max.	
Tri-state or n	ot	Yes,Pin1 E/D	

Crystal Oscillator Specification

3. DIMENSION



4. MECHANICAL SPECIFICATION

1) Terminal Strength

Lead pulling test Conditions: Load 907.2 gram Direction To the downward Duration of applied force 5 seconds There should be no distortion in appearance. **Results:** Lead bending test Conditions: Load 453.6 gram Bending angle 90° to normal position Rate of bending 3 seconds in each cycle Number of bending 3 **Results:** There should be no distortion in appearance.

n

rongFirst		Crystal Oscillator Specification
2) Lead solder al	bility test	
Conditions	: Dipping in solder(+	$-230^{\circ}\text{C} \pm 5^{\circ}\text{C}$)for 5 seconds
Results:	11 U	surface being tested should be
	coated uniformly w	_
3) Vibration test		
Conditions	1 2	10-55Hz
	Amplitude	0.762mm
	Sweep	1.0 minute
	Duration	2 hours
Results:		ve form of tested products must
	Remain within spec	ifications.
4) Drop test		
Conditions:	Method of drop	Natural drop
	Dropping floor	Hard wood board
	Height	30cm
	Number of drops	3 times
Results:	-	e form of tested products must
	remain within specifi	-
	ONMENTAL SPEC	CIFICATION
1) Temperature t	rest	CIFICATION
 Temperature t * Temperatu 	est re cycling test	
1) Temperature t	est re cycling test	1) At -55°C,30 minutes
 Temperature t * Temperatu 	est re cycling test	1) At -55°℃,30 minutes 2) At +25°℃,10 - 15 minutes
 Temperature t * Temperatu 	est re cycling test	1) At -55 °C,30 minutes 2) At +25 °C,10 - 15 minutes 3) At +85 °C,30 minutes
 Temperature t * Temperatu 	test re cycling test s: Steps of cycle	1) At -55 °C,30 minutes 2) At +25 °C,10 - 15 minutes 3) At +85 °C,30 minutes 4) At +25 °C,10 - 15 minutes
1) Temperature t * Temperatu Conditions	est re cycling test s: Steps of cycle Number of cycles	 At -55°C,30 minutes At +25°C,10 - 15 minutes At +85°C,30 minutes At +25°C,10 - 15 minutes At +25°C,10 - 15 minutes
 Temperature t * Temperatu 	rest re cycling test s: Steps of cycle Number of cycles Frequency and wa	1) At -55°C,30 minutes 2) At +25°C,10 - 15 minutes 3) At +85°C,30 minutes 4) At +25°C,10 - 15 minutes 3 times ve form of tested products must
1) Temperature t * Temperatu Conditions	est re cycling test s: Steps of cycle Number of cycles	1) At -55°C,30 minutes 2) At +25°C,10 - 15 minutes 3) At +85°C,30 minutes 4) At +25°C,10 - 15 minutes 3 times ve form of tested products must
 Temperature t Temperature t Conditions Results: 	est re cycling test s: Steps of cycle Number of cycles Frequency and wa remain within spec	1) At -55°C,30 minutes 2) At +25°C,10 - 15 minutes 3) At +85°C,30 minutes 4) At +25°C,10 - 15 minutes 3 times ve form of tested products must
1) Temperature t * Temperatu Conditions	est re cycling test s: Steps of cycle Number of cycles Frequency and wa remain within spec	1) At -55°C,30 minutes 2) At +25°C,10 - 15 minutes 3) At +85°C,30 minutes 4) At +25°C,10 - 15 minutes 3 times ve form of tested products must
 Temperature t Temperature t Conditions Results: * Low Temperature 	est re cycling test s: Steps of cycle Number of cycles Frequency and wa remain within spec erature test Temperature	 At -55°C,30 minutes At +25°C,10 - 15 minutes At +85°C,30 minutes At +25°C,10 - 15 minutes At +25°C,10 - 15 minutes times ve form of tested products must ifications.
 Temperature t Temperature t Conditions Results: * Low Temperature 	est re cycling test s: Steps of cycle Number of cycles Frequency and wa remain within spec erature test Temperature Length of test	1) At -55°C, 30 minutes 2) At +25°C, 10 - 15 minutes 3) At +85°C, 30 minutes 4) At +25°C, 10 - 15 minutes 3 times ve form of tested products must ifications. $-20°C \pm 2°C$ 96 hours
 Temperature t Temperature t Temperature t Conditions Results: * Low Temperature t Conditions:	est re cycling test s: Steps of cycle Number of cycles Frequency and wa remain within spec erature test Temperature Length of test There should be no	1) At -55 °C, 30 minutes 2) At +25 °C, 10 - 15 minutes 3) At +85 °C, 30 minutes 4) At +25 °C, 10 - 15 minutes 3 times ve form of tested products must ifications. $-20 °C \pm 2 °C$ 96 hours o stain on surface of products.
 Temperature t Temperature t Temperature t Conditions Results: * Low Temperature t Conditions:	est re cycling test s: Steps of cycle Number of cycles Frequency and wa remain within spec erature test Temperature Length of test There should be no	1) At -55°C,30 minutes 2) At +25°C,10 - 15 minutes 3) At +85°C,30 minutes 4) At +25°C,10 - 15 minutes 3 times ve form of tested products must ifications. $-20°C \pm 2°C$ 96 hours o stain on surface of products. e form of tested products must
 Temperature t Temperature t Temperature t Conditions Results: Kesults: Results: 	est re cycling test s: Steps of cycle Number of cycles Frequency and wa remain within spec erature test Temperature Length of test There should be no Frequency and wav	1) At -55°C,30 minutes 2) At +25°C,10 - 15 minutes 3) At +85°C,30 minutes 4) At +25°C,10 - 15 minutes 3 times ve form of tested products must ifications. $-20°C \pm 2°C$ 96 hours o stain on surface of products. e form of tested products must
 Temperature t Temperature t Temperature t Conditions Results: Kesults: Results: Aging test 	est re cycling test s: Steps of cycle Number of cycles Frequency and wa remain within spec erature test Temperature Length of test There should be no Frequency and wav remain within speci	1) At -55 °C, 30 minutes 2) At +25 °C, 10 - 15 minutes 3) At +85 °C, 30 minutes 4) At +25 °C, 10 - 15 minutes 3 times ve form of tested products must ifications. $-20 °C \pm 2 °C$ 96 hours o stain on surface of products. e form of tested products must fications.
 Temperature t Temperature t Temperature t Conditions Results: Kesults: Results: 	est re cycling test s: Steps of cycle Number of cycles Frequency and wa remain within spec erature test Temperature Length of test There should be no Frequency and wav	1) At -55°C, 30 minutes 2) At +25°C, 10 - 15 minutes 3) At +85°C, 30 minutes 4) At +25°C, 10 - 15 minutes 3 times ve form of tested products must ifications. -20°C ± 2 °C 96 hours o stain on surface of products. e form of tested products must

Results: Deviation of frequency must be less than ± 3 ppm 3) Salt spray test Conditions: Temperature $+35^{\circ}C \pm 2^{\circ}C$ Length of test 48 hours NaCI % 5% **Results:** There should be no stain on surface of products. 4) Humidity test $+40^{\circ}\text{C}\pm2^{\circ}\text{C}$ Conditions: Temperature Relative humidity 90 - 95% Length of test 96 hours **Results:** a. Insulation resistance must be 500 M Ω /100 Vac. minimum b. Resistance and wave form must remain within specifications.

Crystal Oscillator Specification

© Copyright 2018 StrongFirst. All Rights Reserved.

Strong Electronics&Technology Limited