

规格书编号

SPEC NO :

# 产品规格书

# SPECIFICATION

CUSTOMER 客户: \_\_\_\_\_  
PRODUCT 产品: \_\_\_\_\_ OSCILLATOR \_\_\_\_\_  
MODEL NO 型号: \_\_\_\_\_ SOC7-500KHZ-50-5.V/E TRI \_\_\_\_\_  
PREPARED 编制: \_\_\_\_\_ LEO \_\_\_\_\_ CHECKED 审核: \_\_\_\_\_ YORK \_\_\_\_\_  
APPROVED 批准: \_\_\_\_\_ LIUMING \_\_\_\_\_ DATE 日期: \_\_\_\_\_ 2018-11-29 \_\_\_\_\_

客户确认 CUSTOMER RECEIVED:		
审核 CHECKED	批准 APPROVED	日期 DATE

无锡市好达电子有限公司  
Shoulder Electronics Limited

更改历史记录  
History Record

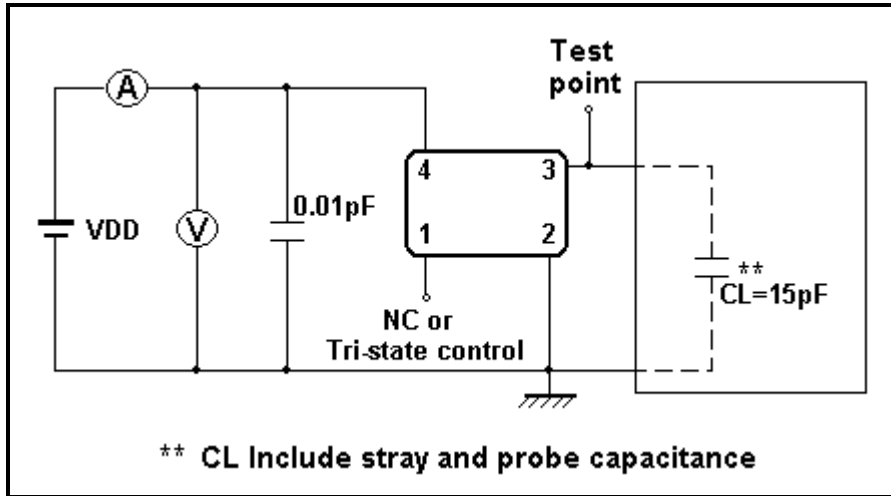
更改日期 Date	规格书编号 Spec. No.	产品型号 Part No.	客户产品型号 Customer No.	更改内容描述 Modify Content	备注 Remark

**1. Electrical characteristics**

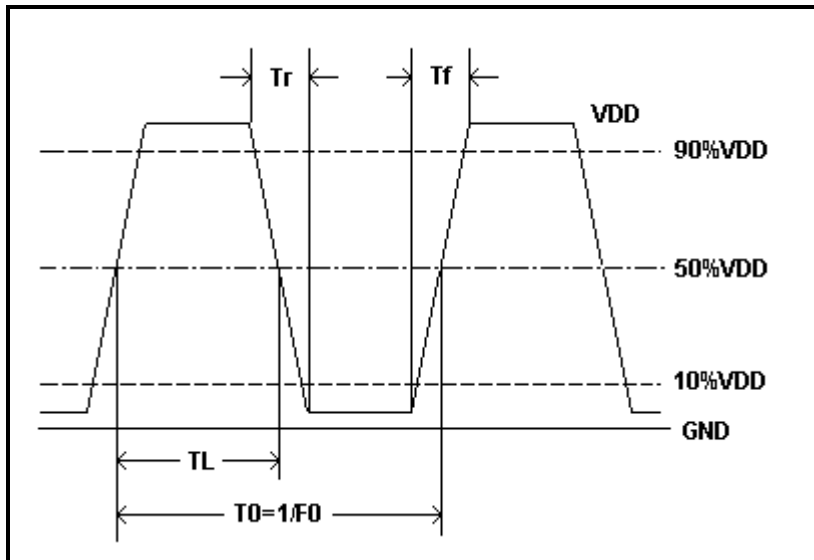
Items	Symbol	Specification			Unit	Notes
		Min	Typ	Max		
Model No		SOC7				
Blank Cutting Mode		AT-CUT, FUND.				
Nominal Frequency		500.000			KHz	
Oscillation Mode		<input checked="" type="checkbox"/> Fundamental <input type="checkbox"/> 3rd				
Frequency Stability		±50ppm			ppm	OVERALL
Operating Temperature	Topr	-40		85	°C	
Storage Temperature	Tstg	-40		105	°C	
Power supply voltage	VDD	5V±10%VDD			V	
Output Load			15		pF	HCMOS
Current consumption	IDD			15	mA	
Rise time/Fall time	Tr/Tf			5	ns	
Output Symmetry	Duty	40		60	%	@50% VDD
High Level output voltage	V <sub>OL</sub>	90%V <sub>DD</sub>			V	
Low Level output voltage	V <sub>OL</sub>			10% V <sub>DD</sub>	V	
Standby current	I <sub>ST</sub>			10	μ A	OE=GND, No load
Start up time	Tosc			5	ms	
High Level input voltage	V <sub>IH</sub>	0.7V <sub>DD</sub>			V	INH
Low Level input voltage	V <sub>IL</sub>			0.3V <sub>DD</sub>	V	INH
Aging:		-3		+3	ppm	Per year
Storage Temp/Humidity		20-30°C/30-60%				

**Remark:** Sample Data See Attachment

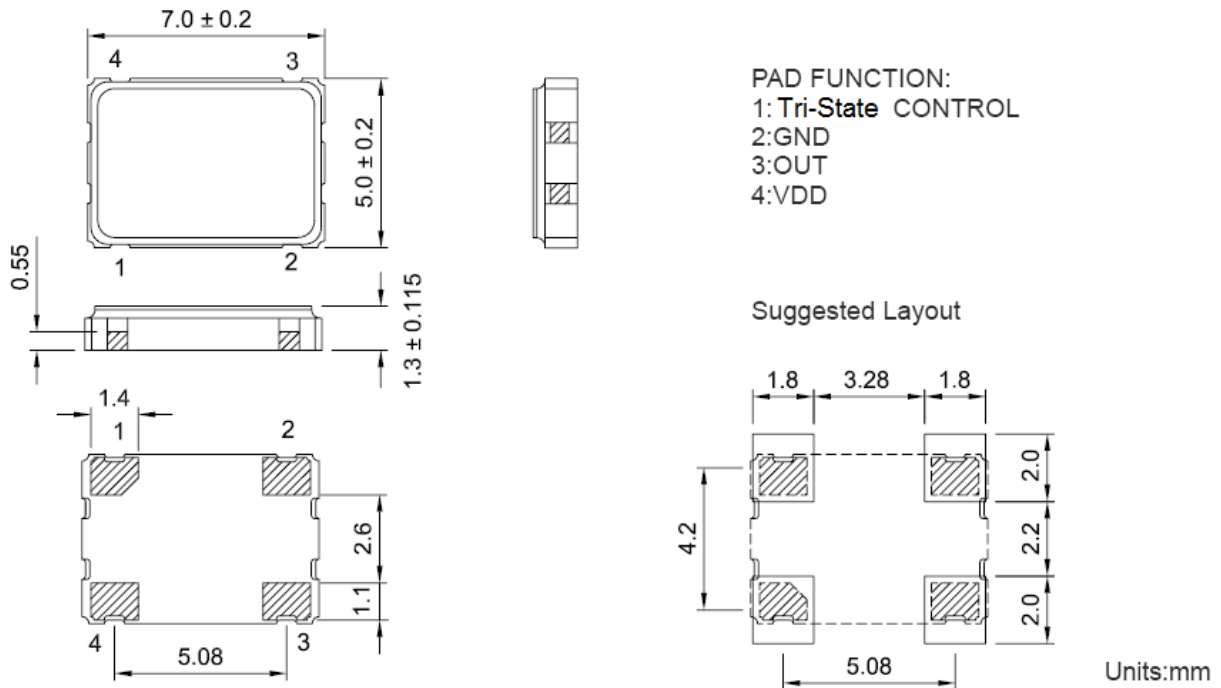
**2. Test Diagram**



**3. Output waveform**



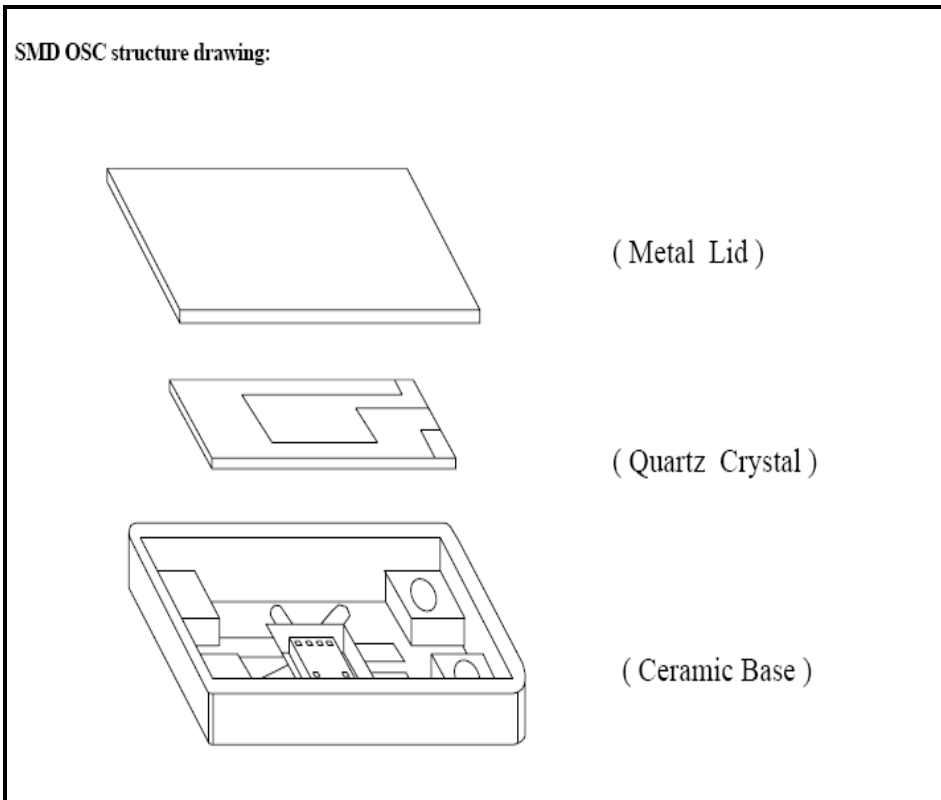
**4. Solder Dimension And Pattern**



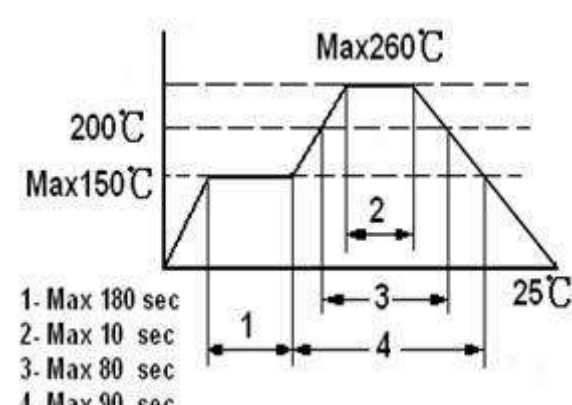
SOC7

**Note:** A 0.01μF bypass capacitor should be placed between V<sub>DD</sub> and GND to minimize power supply line noise.

**5. Structure drawing**



## 6. Reliability Specification

	Item	Condition	Standard
1.	Drop characteristics	Free drop from 75cm height on a hard wooden board for 3 times. (Board is thickness more than 30 mm.)	Frequency change: ≤±5ppm
2.	Mechanical shock	Device are shocked to half sine wave (1000g) three mutually perpendicular axes each 3 times	Frequency change: ≤±5ppm
3.	Shake characteristics	Shake frequency 10~55Hz, cyc1~2 minutes, swing 1.5mm, direction x/y/z, all 30 minutes, test after 1 hours.	Frequency change: ≤±5ppm
4.	Humidity characteristics	+40±2℃ & 90%~95% R.H. 250 hours	Frequency change: ≤±5ppm
5.	Low temperature characteristics	-40±2℃, 250 hours, put in room temperature, test after 1 hours.	Frequency change: ≤±5ppm
6.	High temperature characteristics	+85±2℃, 250 hours, put in room temperature, test after 1 hours.	Frequency change: ≤±5ppm
7.	Temperature cycling	-30±3℃/30±3 min~+85±2℃/30±3min, 5 cycles	Frequency change: ≤±5ppm
8.	Refluence examination	 <p>1- Max 180 sec 2- Max 10 sec 3- Max 80 sec 4- Max 90 sec</p>	Frequency change: ≤±5ppm

**7. Packing Specification**

	7050
W	16.00±0.05
E	1.75±0.10
F	7.5±0.10
T	0.35±0.05
P	8.00±0.10
P0	4.00±0.10
P2	2.00±0.10
D0	φ 1.50+0.10
D1	φ 1.50MIN
A0	5.40±0.10
K0	1.80±0.10
B0	7.40±0.10
A	φ 178±2.0
B	2.00±0.50
C	φ 13.2±0.20
D	φ 20.0±0.50
N	φ 60.5±1.0
W1	16.5±0.20
T1	1.80±0.20

