

编号	SCTF2022LC918
日期	2022-9-19
版本	B01

承认书

SPECIFICATION FOR APPROVAL

客户名称 Customer Name : 立创商城

供应商物料名称 Part Name : 差分石英晶体振荡器

产品描述 Description : OSC3225 100.000MHz 3.3V LVDS ±20ppm

供应商物料料号 Part NO. : SX3M100.000B20F30DNN

供应商名称 Supplier Name : 深圳市星通时频电子有限公司

PLEASE CONFIRM OUR SPECIFICATION。敬请确认规格书之内容。

CUSTOMER APPROVAL 客户审批		
物料代号 PART NO. _____		
使用于机型 USED IN MODEL: _____		
工程部	品质部	采购部

(敬请确认后返回一份, 谢谢!)

SUPPLIER APPROVAL 供应商审批		
DGN. 制表人	CKD. 校对	APPR. 审核人 印章
吴丽红	李霞	

地址: 深圳市南山区龙珠四路方大城T2栋10楼

Add: 10 / F, Building T2, Fangdacheng, Longzhu 4th Road, Nanshan District, Shenzhen, China.

Website: www.sctf-crystal.com

Email: info@sctf-crystal.com

TEL: 0755-86097430

FAX: 0755-86097259



产品规格书
SPECIFICATION FOR APPROVAL

1	Cover 封面.....	Page 1
2	Contents 目录.....	Page 2
3	Revised Page 修改页.....	Page 3
4	Specifications of Oscillator 规格书.....	Page 4
5	Test Circuit & Output Waveform 测试电路与输出波形.....	Page 5
6	Dimensions 尺寸图.....	Page 6
7	Product Structure & Marking 结构与印字.....	Page 7
8	Reflow Profiles 回流焊.....	Page 8
9	Reliability Specification 可靠性测试.....	Page 9
10	Package 包装.....	Page 10

SHENZHEN SCTF ELECTRONICS CO. , LTD		
DATE	Specification of Quartz Crystal Oscillator 石英晶体振荡器规格书	PAGE
2022-9-19	P/N: SX3M100.000B20F30DNN Spec. NO. : SCTF2022LC918	2

3 Revised Page

Rev.	Revise page	Revise Contents	Date	Ref. No.	Reviser
1	N/A	Initial released	2022-9-19	N/A	吴丽红

SHENZHEN SCTF ELECTRONICS CO. , LTD

DATE	Specification of Quartz Crystal Oscillator 石英晶体振荡器规格书	PAGE
2022-9-19	P/N: SX3M100.000B20F30DNN Spec. NO. : SCTF2022LC918	3

4 QUARTZ CRYSTAL UNIT SPECIFICATION

■ Electrical Specification 电气参数

No.	Item	Symb.	Electrical Spec.	Unit	Notes
1	Holder Type 封装		SMD 3225		
2	Nominal Frequency 标称频率	Fo	100.000000	MHz	
3	Frequency Stability 常温频差	Fo_tol	± 20	ppm	T_use = + 25°C
4	Temperature Drift 温度频差	Fo_Tc	± 30	ppm	T_use = - 40°C ~ +85 °C
5	Operating Voltage 工作电压	V _{DD}	3.3	V	± 5% max.
6	Output 输出模式		LVDS		
7	Output Load 负载		100	Ω	
8	Current Consumption 消耗电流	I _{cc}	100 Max.	mA	At maximum supply voltage
9	Operating Temperature Range 工作温度范围	T_use	-40~+85	°C	
10	Storage Temperature Range 保存温度范围	T_stg	-55~+125	°C	
11	Duty Cycle 占空比	TH/T	45 ~ 55	%	
12	Rise / Fall Time 上升/下降沿时间	Tr/Tf	1.0 Max.	ns	
13	Low Output Voltage 低电平	VoL	0.9 Min.	V	
14	High Output Voltage 高电平	VoH	1.6 Max.	V	
15	Start-up Time 启动时间	S_T	3.0 Max.	ms	
16	Enable Voltage High (Logic 1) 使能高电平	V _{hi}	70% V _{dd} Min.	V	Logic "1" Or Floating input, Outputs enable; Logic "0", Outputs disable 输出使能OE是高电平1或者悬空,频率输出 输出使能OE是低电平0,则无频率输出
17	Enable Voltage Low (Logic 0) 使能低电平	V _{lo}	30% V _{dd} Max.	V	
18	RMS Phase Jitter 抖动		0.5 Max.	pSec	Period Jitter(12KHz-20MHz)
19	Aging 老化	f_age	± 3.0	ppm	First year at 25°C

SHENZHEN SCTF ELECTRONICS CO., LTD

DATE

Specification of Quartz Crystal Oscillator
石英晶体振荡器规格书

PAGE

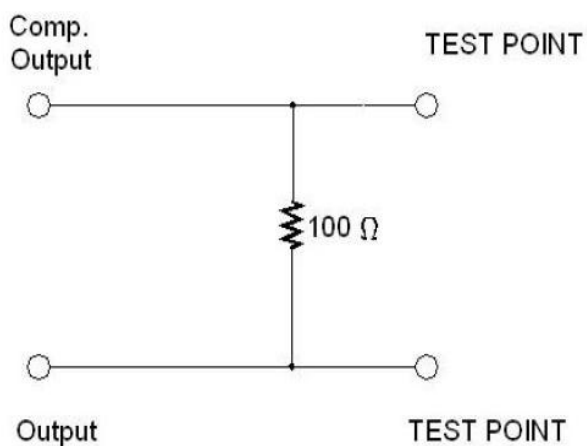
2022-9-19

P/N: SX3M100.000B20F30DNN
Spec. NO. : SCTF2022LC918

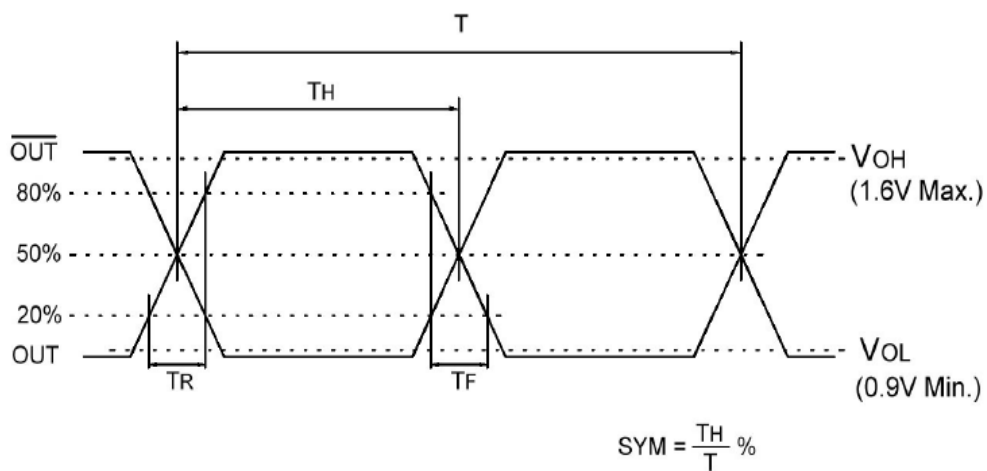
4

5 TEST CIRCUIT & OUTPUT WAVEFORM

■ TESTING CIRCUIT 测试电路



■ WAVEFORM CONDITIONS 输出波形



SHENZHEN SCTF ELECTRONICS CO. , LTD

DATE

Specification of Quartz Crystal Oscillator
石英晶体振荡器规格书

PAGE

2022-9-19

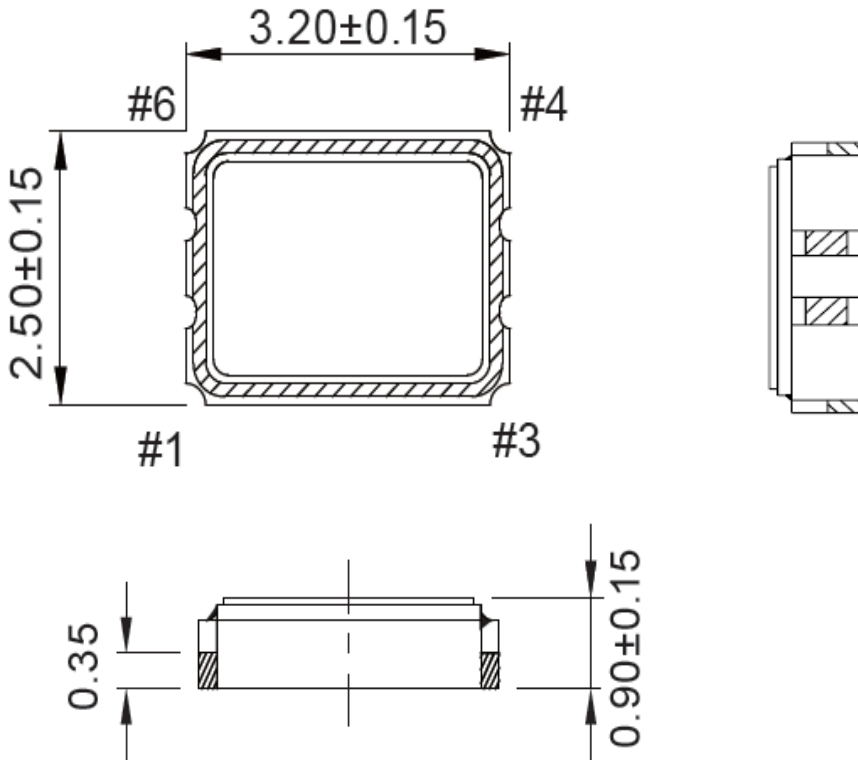
P/N: SX3M100.000B20F30DNN
Spec. NO. : SCTF2022LC918

5

6 DIMENSIONS

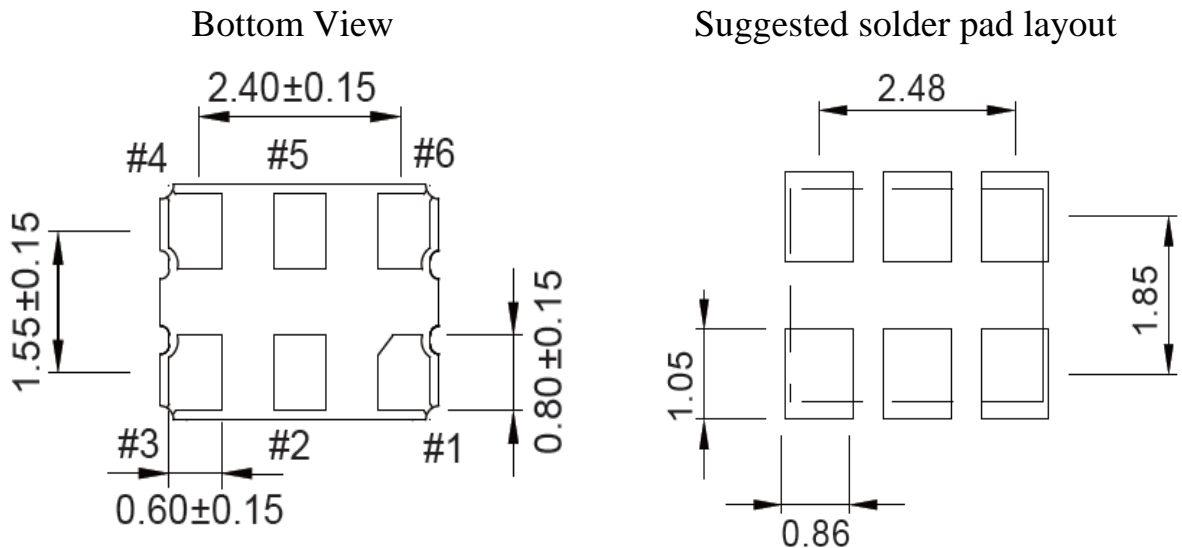
■ DIMENSIONS 产品尺寸

Units (单位): mm(毫米)



Pin	Function
#1	Tri-State
#2	N.C
#3	GND.
#4	Output
#5	Comp. Output
#6	V _{DD}

■ Pad size 焊盘尺寸



SHENZHEN SCTF ELECTRONICS CO., LTD

DATE

Specification of Quartz Crystal Oscillator
石英晶体振荡器规格书

PAGE

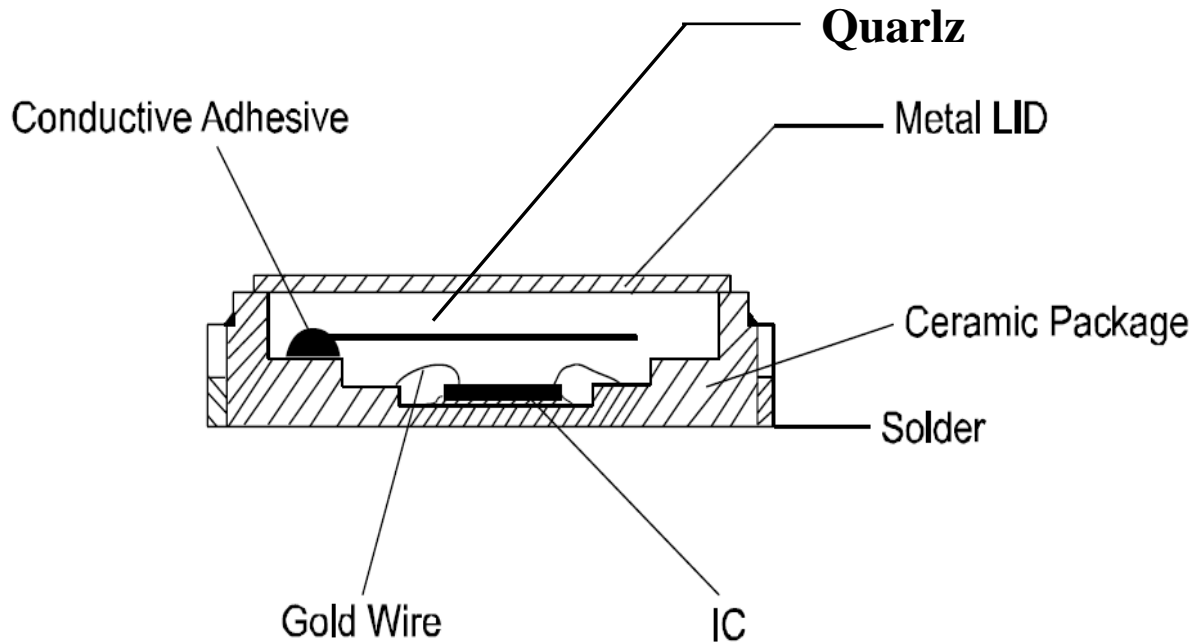
2022-9-19

P/N: SX3M100.000B20F30DNN
Spec. NO. : SCTF2022LC918

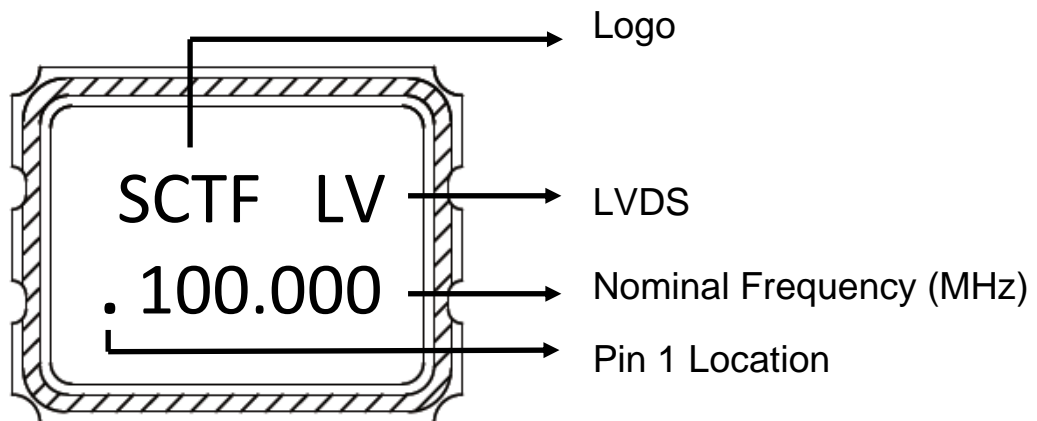
6

7 PRODUCT STRUCTURE & MARKING

■ Product Structure 产品结构



■ Marking 印字

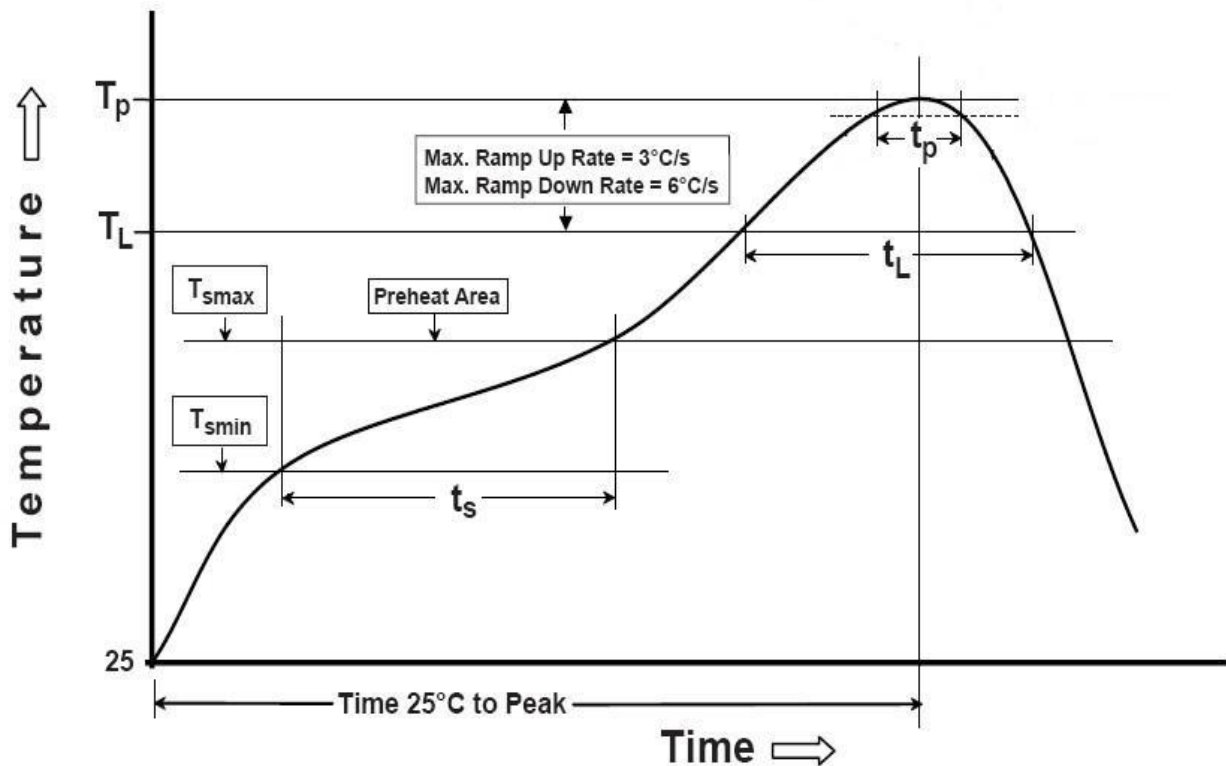


SHENZHEN SCTF ELECTRONICS CO., LTD		
DATE	Specification of Quartz Crystal Oscillator 石英晶体振荡器规格书	PAGE
2022-9-19	P/N: SX3M100.000B20F30DNN Spec. NO. : SCTF2022LC918	7

8 REFLOW PROFILES

REFLOW PROFILES 回流焊条件

Profile Feature	Sn-Pb Eutectic Assembly	Pb-Free Assembly
Preheat/Soak		
● Temperature Min(T_s min)	100 °C	150 °C
● Temperature Max (T_s max)	150 °C	200 °C
● Time (T_s min to T_s max)	60-120 seconds	60-120 seconds
Ramp-up rate (TL to T_p)	3 °C/second max.	3 °C/second max.
Time maintained above		
● Liquidous temperature (TL)	183 °C	217 °C
● Time (t_L) maintained above TL	60-150 seconds	60-150 seconds
Peak package body temperature (T_p)	235°C	260°C
Time within 5 °C of the specified	20 seconds	30 seconds
Ramp-down rate (T_p to TL)	6 °C/second max.	6 °C/second max.
Time 25 °C to peak temperature	6 minutes max.	8 minutes max.
Suggest reflow times	2 Times max.	



SHENZHEN SCTF ELECTRONICS CO., LTD

DATE	Specification of Quartz Crystal Oscillator 石英晶体振荡器规格书	PAGE
2022-9-19	P/N: SX3M100.000B20F30DNN Spec. NO. : SCTF2022LC918	8

9 RELIABILITY SPECIFICATION

■ Environmental and mechanical characteristics 可靠性参数

No.	项目 ITEM	条件 CONDITIONS	合格标准 BASIS OF VERDICT
1	跌落 DROP	100cm高处自由跌落到3cm厚木板上,3次 High:100cm;Thickness:3cm;3 times.	$\Delta FL \leq \pm 5PPM$
2	振动 VIBRATION	频率 Frequency:10~57.7Hz:幅度 Amplitude: $\pm 0.75mm$ 频率Frequency:57.7Hz~500Hz:加速度幅度acceleration rate:98m/s ² 周期 Cycle time:10-500-10Hz: 15min 振动方向 Direction:X,Y, Z 振动时间 Duration: 每个方向2小时 2 h/direction.	$\Delta FL \leq \pm 5PPM$
3	温度变化 TEMPERATURE SHOCK	-40°C \pm 2°C (30min) \leftrightarrow 85°C \pm 2°C (30min);循环10次 -40°C \pm 2°C (30min) \leftrightarrow 85°C \pm 2°C (30min);For 10	$\Delta FL \leq \pm 5PPM$
4	湿热 HUMIDITY	cycles 温度:40°C \pm 2°C;湿度90-95%;时间:96小时 Temp:40°C \pm 2°C;Humidity:90-95%;Times:96h	$\Delta FL \leq \pm 5PPM$
5	低温 COLD RESISTANCE	温度:-40°C \pm 2°C;时间:96小时 Temp:-40°C \pm 2°C;Times:96h	$\Delta FL \leq \pm 5PPM$
6	高温1 HEAT RESISTANCE 1	温度:100°C \pm 2°C;时间:96小时 Temp:100°C \pm 2°C;Times:96h	$\Delta FL \leq \pm 5PPM$
7	高温2 HEAT RESISTANCE 2	温度:155°C \pm 2°C;时间:2小时 Temp:155°C \pm 2°C;Times:2h	$\Delta FL \leq \pm 5PPM$
8	高温3 HEAT RESISTANCE 3	温度:85°C \pm 2°C;电压:3.3V/5.0V;时间:96小时 Temp:85°C \pm 2°C;Voltage:3.3V/5.0V;Times:96h	$\Delta FL \leq \pm 5PPM$
9	回流焊 REFLOW	150°C \pm 5°C 保持120s后升到270°C \pm 5°C 保持10s, 升温 和保温时间小于200s, 常温放置1~2h后测定 Keep 150 °C \pm 5 °C 120s and then rose to 270 °C \pm 5 °C for 10s, warming and holding time is less than the 200s, placed at room temperature 1 ~ 2h after test	$\Delta FL \leq \pm 5PPM$
10	盐雾 SALT SPRAY	盐雾浓度:5%;温度:35°C;时间:24小时 Salt density:5%;Temp:35°C;Times:24h	目测无明显腐蚀现象 Visual no significant
11	老化 AGING	温度:85°C;时间:30天 Temp:85°C;Times:30days	$\Delta FL \leq \pm 5PPM$
12	气密性 LEAKAGE	氦气(0.6~0.65MPa):10分钟 He(0.6~0.65MPa):10min	$\leq 3 \times 10^{-9} Pa \cdot m^3/s$
13	焊接 SOLDER	温度:260°C \pm 5°C Temp:260°C \pm 5°C	浸锡率大于90% Soldering tin

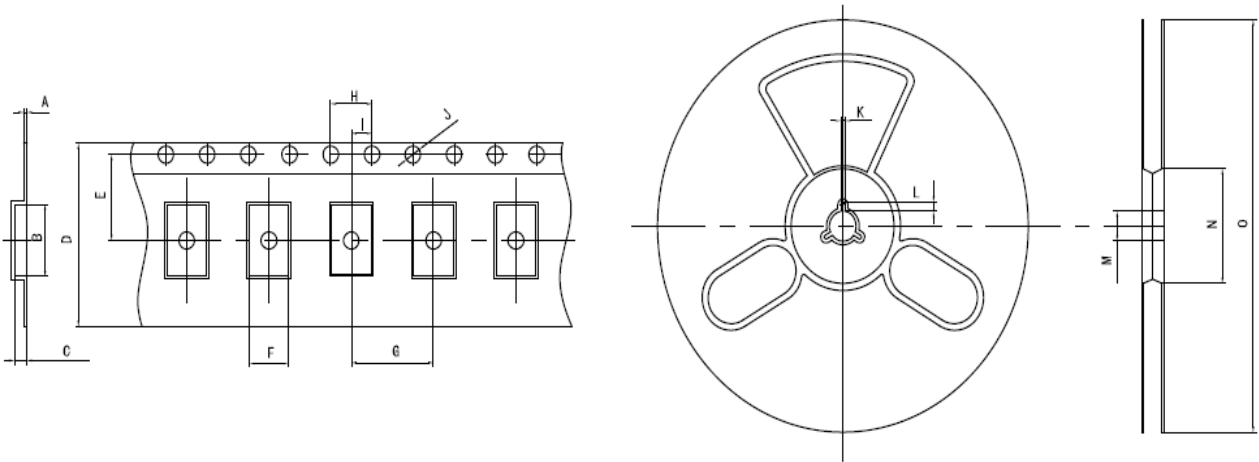
SHENZHEN SCTF ELECTRONICS CO., LTD

DATE	Specification of Quartz Crystal Oscillator 石英晶体振荡器规格书	PAGE
2022-9-19	P/N: SX3M100.000B20F30DNN Spec. NO. : SCTF2022LC918	9

10 PACKAGE

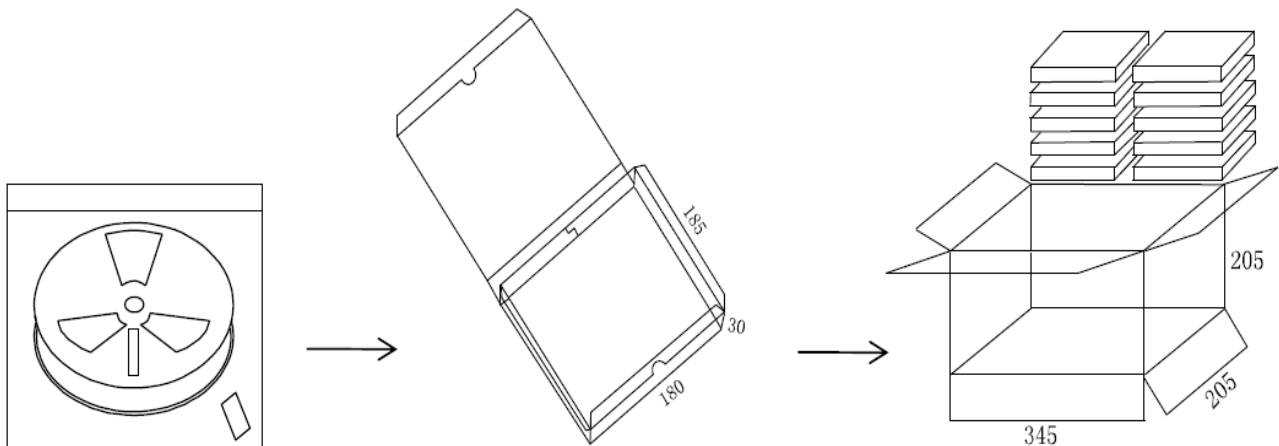
■ Taping Specifications 编带

UNIT(单位):mm(毫米)



TEYE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
3.2×2.5 SMD	0.25	3.60	1.30	8.00	3.50	2.90	4.00	4.00	2.00	1.50	2.00	4.00	13.00	60.00	180.00

■ Packaging specifications 包装



自封袋(Bag)

3000只 = 1 轮

3000pcs = 1 Reel

内包装(Inside package)

1 轮=1 盒

1 Reel=1 box

外包装(Outside Package)

10 盒=1 箱

10 box=1 carton

SHENZHEN SCTF ELECTRONICS CO. , LTD

DATE

Specification of Quartz Crystal Oscillator
石英晶体振荡器规格书

PAGE

2022-9-19

P/N: SX3M100.000B20F30DNN
Spec. NO. : SCTF2022LC918

10

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Standard Clock Oscillators](#) category:

Click to view products by [SCTF](#) manufacturer:

Other Similar products are found below :

[601252](#) [F335-25](#) [F535L-33.333](#) [F535L-50](#) [NBXHBA019LN1TAG](#) [SiT1602BI-22-33E-50.000000E](#) [SiT8209AI-32-33E-125.000000](#)
[SIT8918AA-11-33S-50.000000G](#) [SM4420TEV-40.0M-T1K](#) [F335-24](#) [F335-40](#) [F535L-10](#) [F535L-12](#) [F535L-24](#) [F535L-27](#) [PE7744DW-](#)
[100.0M](#) [ASF1-3.686MHZ-N-K-S](#) [ASV-4.000MHZ-LCS-T](#) [XLH735025.000JU4I8](#) [XLP725125.000JU6I8](#) [XO57CTECNA3M6864](#) [601251](#)
[SiT8503AI-18-33E-0.200000X](#) [SIT8918AA-11-33S-16.000000G](#) [SIT9122AI2C233E300.000000X](#) [XO37CTECNA20M](#) [9120AC-2D2-](#)
[33E212.500000](#) [9102AI-243N25E100.000000](#) [8208AC-82-18E-25.000000](#) [8008AI-72-XXE-24.545454E](#) [8004AC-13-33E-133.33000X](#) [ASFL1-](#)
[48.000MHZ-LC-T](#) [632L3I004M00000](#) [SIT8920AM-31-33E-25.0000](#) [9121AC-2C3-25E100.000000](#) [9102AI-233N33E100.00000X](#) [9102AI-](#)
[233N25E200.000000](#) [9102AI-232H25S125.000000](#) [9102AI-133N25E200.000000](#) [9102AC-283N25E200.000000](#) [9001AC-33-33E1-30.000](#)
[8103AC-13-33E-12.00000X](#) [3921AI-2CF-33NZ125.000000](#) [5730-1SF](#) [XUN736000.032768I](#) [EC3925ETTTS-100.000M TR](#) [SIT1602BC-83-](#)
[33E-10.000000Y](#) [8003AI-12-33S-40.00000Y](#) [1602BI-13-33S-19.200000E](#) [8208AI-2F-18E-25.000000X](#)