深圳市晶科鑫实业有限公

司样品承认书

客户代码：	
物料名称：	贴片钟振
规格型号：	SMD2520 OSC 6PIN 155.520MHZ 3.3V - 40~85℃ LVDS
P N/ SJK：	2N155520G33DC
环保属性：	■RoHS ■REACH ■HF □PAHS □其它
版 次：	A1 2025-5-10 初版
湿敏等级：	一级

承 认 签 章					
供 应 商 承 认			（ ）公 司 承 认		
制定	审 核	核 准	工 程 师	审 核	批 准
贺丹斌	李相同	刘惠光			
SJK 支持			盖章签署		
FAE_EMAIL			日 期		
日 期					
备注：					

Add: 12F, Bldg. 3C, TianAn Cloud Park Phase 1, Bantian, Longgang, Shenzhen, China
Tel: (86) 755 82507042 Fax: (86) 755 88353718 Http://www.q-crystal.com.cn

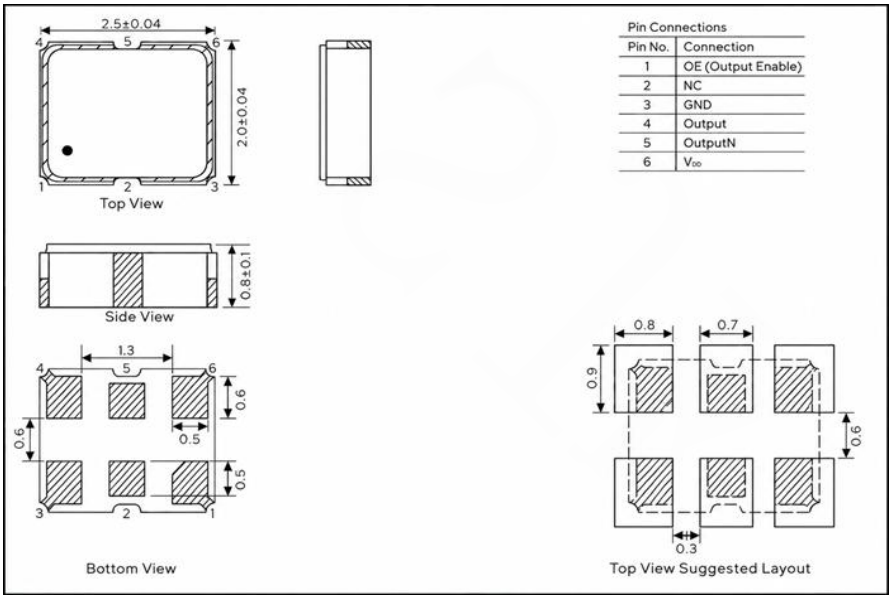
FEATURE

- Fundamental / 3rd overtone solution
- 1.8V, 2.5V or 3.3V operating voltage
- LVDS output, Output frequency range from 10MHz to 2100MHz
- Tri-state function available
- Excellent low phase noise and jitter
- Application: Optical module, Network switch, Server, Data center, High speed converters as ADC and DAC, Router, Factory automation, etc.
- RoHS Compliant / Pb-Free.

ELECTRICAL SPECIFICATIONS

Parameter	Conditions	Specification			
		Min.	Typ.	Max.	Unit
Model		2N			
Nominal Frequency		155.520			MHz
Frequency Stability	vs 25°C	-10	-	+10	ppm
	vs Temperature	-20	-	+20	ppm
Output Type		LVDS			
Output Load		-	100	-	Ω
Supply Voltage		-	3.3	-	V
Operating Temperature		-40	-	+85	°C
Current consumption	RL=100Ω	-	-	20	mA
Stand-by Current		-	-	60	μA
Rise Time / Fall Time	20%-80% of (V_{OH}-V_{OL})	-	-	0.5	ns
Symmetry		45	50	55	%
1 Level Voltage	V_{OH}	-	-	1.6	V
0 Level Voltage	V_{OL}	0.9	-	-	V
Differential Swing(VOD)		250	350	450	mV
1 Level Input Voltage	V_{IH}	70% V_{DD}	-	-	V
0 Level Input Voltage	V_{IL}	-	-	30% V_{DD}	V
Start-up Time	t=0 at 90% V_{DD}	-	-	10	ms
Phase Jitter	12KHz~20MHz	-	-	200	fs

DIMENSION（Unit：mm）

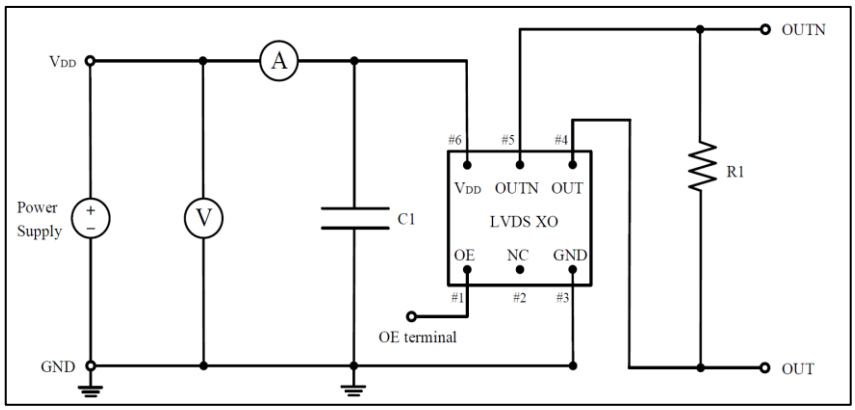


Pin Connections	
Pin No.	Connection
1	OE (Output Enable)
2	NC
3	GND
4	Output
5	OutputN
6	V_{DD}

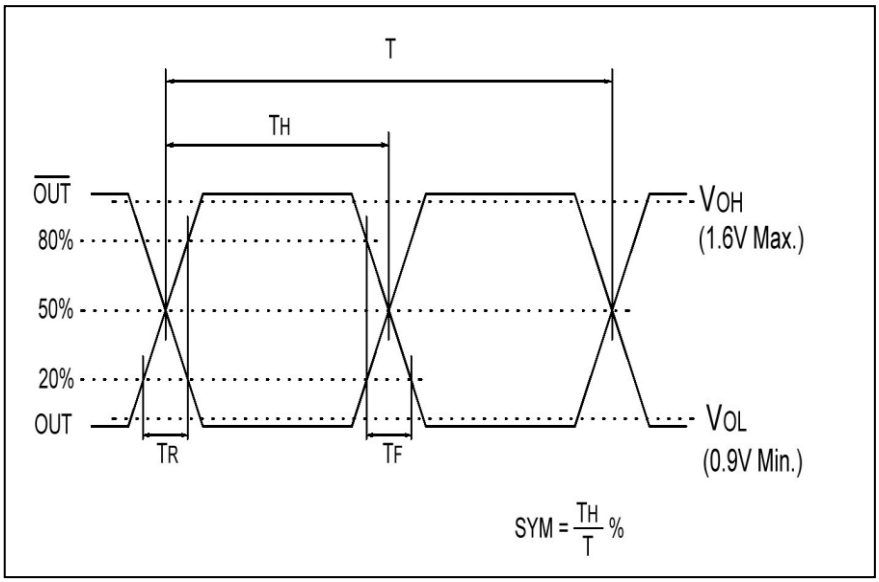
MARK



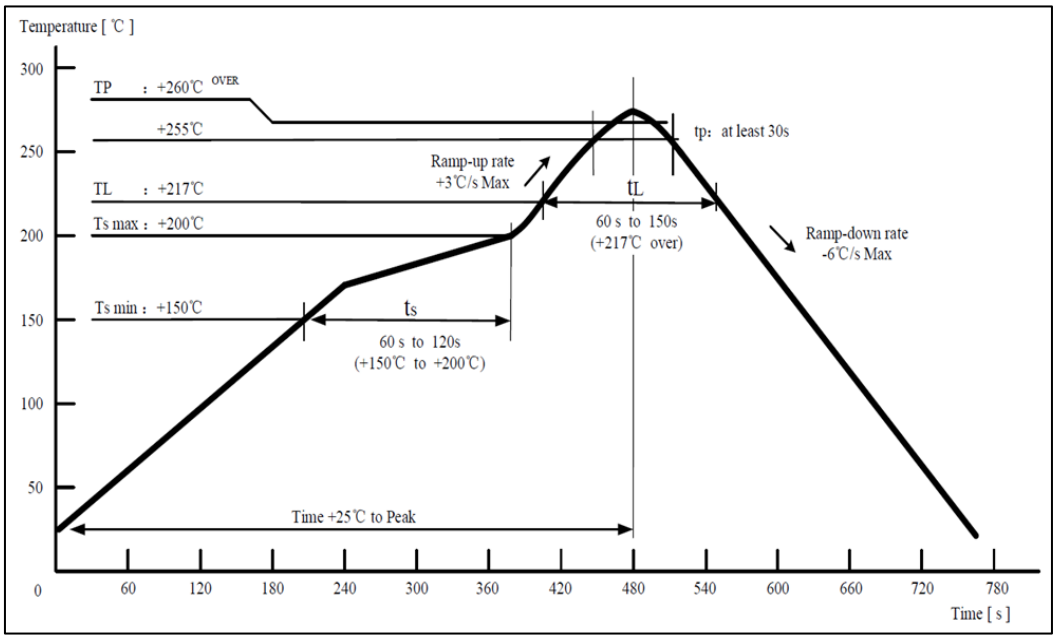
Test Diagram



WAVEFORM CONDITIONS

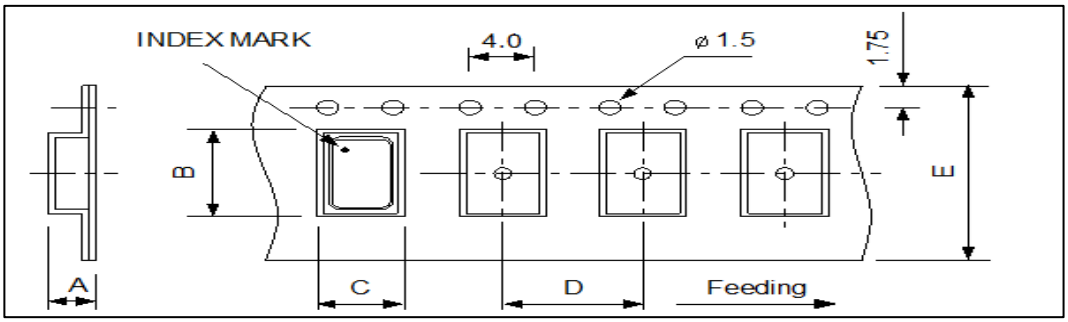


REFLOW CONDITION

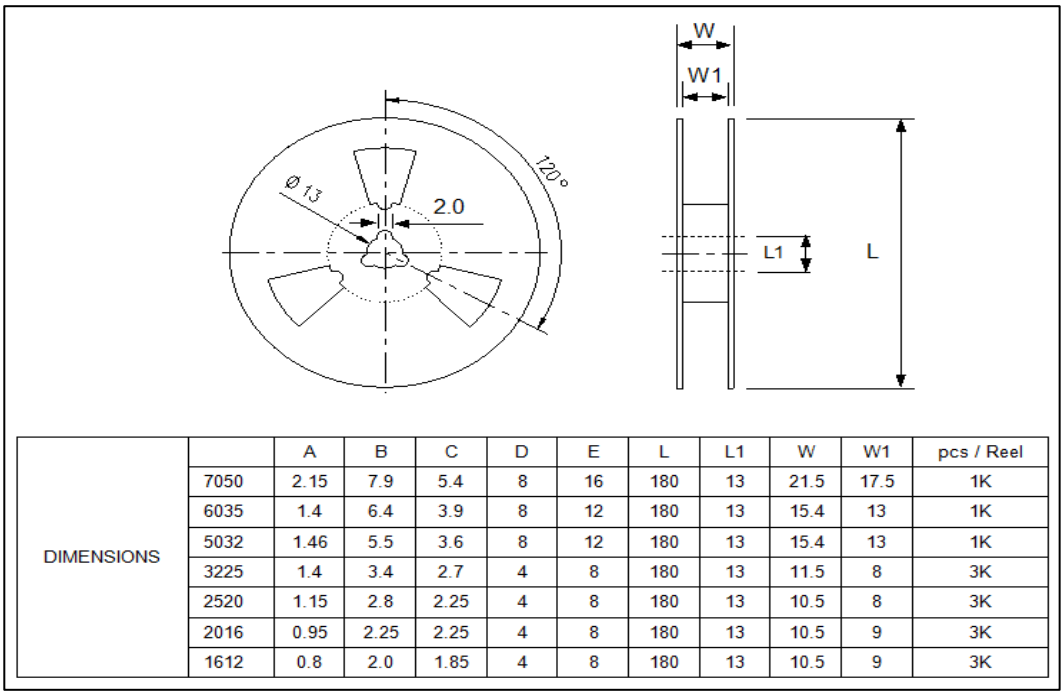


The reflow temperature profile may vary depending on the product model, specifications and frequency range. Refer to the individual product specifications for details

CARRIER TYPE

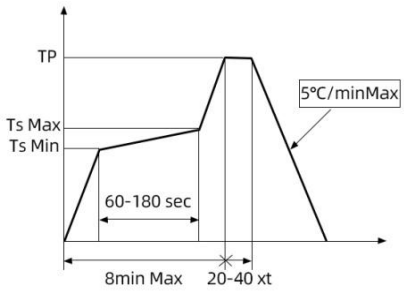


REEL



		A	B	C	D	E	L	L1	W	W1	pcs / Reel
DIMENSIONS	7050	2.15	7.9	5.4	8	16	180	13	21.5	17.5	1K
	6035	1.4	6.4	3.9	8	12	180	13	15.4	13	1K
	5032	1.46	5.5	3.6	8	12	180	13	15.4	13	1K
	3225	1.4	3.4	2.7	4	8	180	13	11.5	8	3K
	2520	1.15	2.8	2.25	4	8	180	13	10.5	8	3K
	2016	0.95	2.25	2.25	4	8	180	13	10.5	9	3K
	1612	0.8	2.0	1.85	4	8	180	13	10.5	9	3K

RELIABILITY TEST SPECIFICATIONS

Test item	Equipment	Condition	Specification
1.SOLDERABILITY TEST	SJK-REL001、RC-328A	TP:260℃ TsMax：200℃ TsMin：150℃ 2 time 	MIL-STD-883E Method 2003.7
2. HERMETICITY TEST	HELIOT-306S	Pressurized 0.4~0.5Mpa ethanol sealed tank for 10 minutes	MIL-STD-883E Method 1014.10
3. VIBRATION TEST	HG-V4、S&A 250B	Enable Crystal(10g) from 10-55-10Hz,X、Y、Z horizontal,1 Minute vibration/time, 1time/ 2 hours.	MIL-STD-883E Method 2007.3
4. MECHANICAL SHOCK	HPC-200、S&A 250B	Enable Crystal 50G(490m/s2) time=11 ms speed=3.4 m/s half sine wave oscillation	JIS C6701
5. DROP TEST	HARD BOARD.S&A250B	75cm High,3 times on hard board	MIL-STD-202F Method 213B
6. HIGH&LOW TEMP STORAGE TEST(Static test)	H-PTH-80CK & HM101-3ABN，S&A 350B/250B	High temperature: 125℃±2℃,1000hr；Low temperature:-40℃±3℃,1000hrs	MIL-STD883C, METHOD 1011.8
7. TEMP &HUM CYCLING TEST	H-PTH-80CK CHAMBER，S&A 350B/250B	Temperature:-10℃±2℃～65℃±2℃,Humidity:93±3%,1 cycle need 24 hrs. 5cycles.	MIL-STD-883E Method 1005.8
8. HIGH TEM. & HUM.STORAGE TEST	H-PTH-80CK CHAMBER，S&A350B/250B	Temperature:85℃±2，Humidity:85+3,-2%,Store 96 hrs	JIS C6701
9. AGING TEST	H-PTH-80CK CHAMBER，S&A350B/250	Temperature:85℃±2，Store 1000 hrs	JIS C5023