深圳市炬烜科技有限公司
CHIP SUN TECHNOLOGY CO., LTD

APPROVAL SHEET

RoHS Compliant

CUSTOMER: _____

DESCRIPTION: ZTTCR 8.000MHz SMD CERAMIC RESONATOR

MANUFACTURER PART NO.: ZTTCR8.00MG

CUSTOMER PART NO: _____

USED IN MODEL: _____

承　　认　　APPROVAL		
工程部 TECHNOLOGY DEPT.	品质部 QUALITY DEPT.	采购部 PURCHASING DEPT.

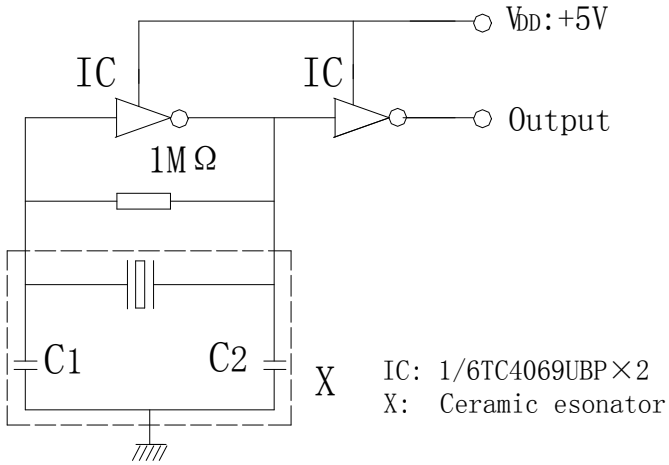
Date: June 24, 2020

深圳市炬烜科技有限公司
CHIP SUN TECHNOLOGY　CO.，LTD
地址 ADD: 深圳市龙华新区大浪腾龙路淘金地电子商务孵化基地 B 座 206
Rm. Rm 206, Tower B, Taojindi Building, Tenglong Road, Dalang Street, Longhua New District, Shenzhen, China
电话 TEL: 86-755-83458796　传真 FAX: 86-755-83459818
网址 WEB ADD: http://www.chinachipsun.com
E-MAIL: sales01@chinachipsun.com

1. Scope: The specification shall cover of SMD ceramic resonator with 8.000MHz used for oscillation circuit	
2. Spec. No.: 20180829-2	
3. Part No.: ZTTCR8.00MG	
4. Electrical Characteristics	
4.1 Nominal Frequency	8.000MHz
4.2 Frequency Tolerance	±0.5%max
4.3 Resonant Resistance	40Ω max
4.4 Build-in Capacitance	33pF
4.5 Temperature Stability (-40℃~+85℃)	±0.3% max
4.6 Insulation Resistance	$5\times10^8\Omega$ min （10V，1min）
4.7 Aging	±0.1% max(From initial value)
4.8 Aging for 10 years	±0.3% max(From initial value)
4.9 Withstanding Voltage	$100V_{DC}$ 5 sec max
4.10 Max Voltage	
DC	$6V_{DC}$
AC	$15V_{P-P}$
4.11 Operating Temperature	-40℃~+85℃
4.12 Storage Temperature	-45℃~+85℃
5 Measurement 5.1 Measurement Condition Measurement shall be carried out at the standard temperature of 25 ± 2℃,and humidity 55 ± 5% under normal air pressure. If no specific requirements, Test can be carried out under 5-35℃,and humidity 45-65%. 5.2 Measuring Circuit and Equipment Nominal frequency shall be measured by the standard test circuit as shown in Fig.1, Resonant Resistance shall be measured by network analyzer.	

CHIP SUN TECHNOLOGY CO.，LTD.

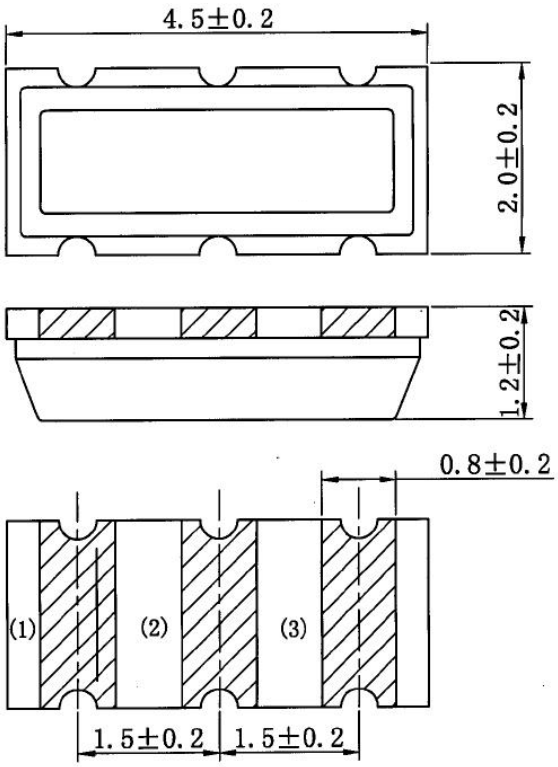
DESCRIPTION	SMD CERAMIC RESONATOR ZTTCR 8.00MHZ ±0.5%
DATE	June 24, 2020



6. Outline

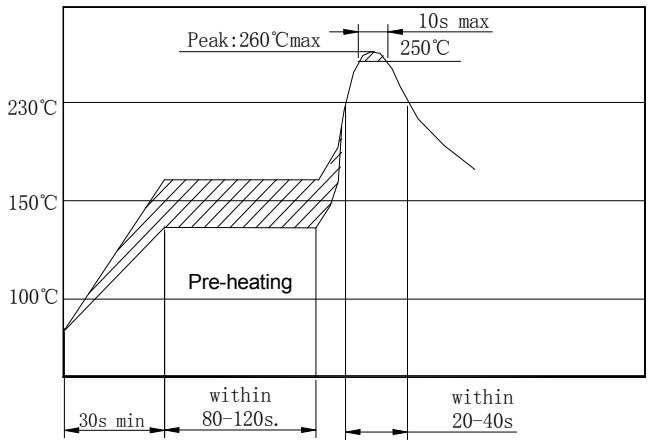
6.1 Appearance: Mark shall be clear; appearance shall be smooth and no damage.

6.2 Dimensions:



\

CHIP SUN TECHNOLOGY CO.，LTD.	
DESCRIPTION	SMD CERAMIC RESONATOR ZTTCR 8.00MHZ ±0.5%
DATE	June 24, 2020

7. Physical Characteristics 7.1 Random Drop	Resonator shall be measured after 3 times random frops from the height of 1.0mm on wooden floor	No visible damage and it meet Table 1
7.2 Vibration	Resonator shall be measured after being applied vibration of amplitude of 1.5mm with 10-55Hz band of vibration frequency to each of 3 perpendicular directions for 2 hours	No damage and it meet Table 1.
7.3 Solder ability	The electrode of resonator are immersed in aide solder for 5scc and then immersed in soldering bath of 230±5℃,for3±0.5scc.	At least 95% electrode shall be covered with solder.
8. Environmental Characteristics		
8.1 Humidity	After being placed in a chamber with 90-95%R.H.at 60±2℃for 100 hours and then being placed in room temperature for 1 hour, resonator shall be measured.	It shall meet Table 1
8.2 Resistance to Solder Heat		
(1) Reflow solder	After resonator is soldered for 1 time in following temperature conditions, and then be placed in natural condition for 24-25 hours. Resonator shall be measured.  	No visible damage and it meet Table 1.
(2) Solder by Iron	Resonator is soldered at 280±5℃ for 3±0.5sec. Then be placed in natural condition for 24 hours, Iron do not touch resonator while soldering.	No visible damage and it meet Table 1.

CHIP SUN TECHNOLOGY CO.，LTD.	
DESCRIPTION	SMD CERAMIC RESONATOR ZTTCR 8.00MHZ ±0.5%
DATE	June 24, 2020

8.3 High Temperature	After being placed in a chamber with 85±-2℃ for 100 hours and then being placed in room temperature for 1 hour, resonator shall be measured.	It shall meet Table1
8.4 Low Temperature	After being placed in a chamber with -40±2℃ for 100 hours and then being placed in room temperature for 1 hour, resonator shall be measured.	It shall meet Table1
8.5 Heat Shock	After being kept at room temperature, resonator shall be placed at temperature of -55℃.for 30 minutes, then be placed at temperature.85℃.for 30 minutes. After that returned to -55℃ again. Repeated above cycle for 5times. After being kept in room temp.for 1 hour, resonator shall be measured.	It shall meet Table1

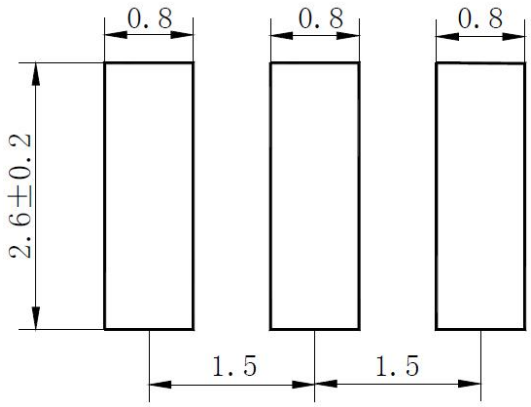
Table 1

Item	**Variation**
Oscillation Frequency	**±5% Max. (Please refer to initial value)**
Resonant Resistance	**40Ω Max.**

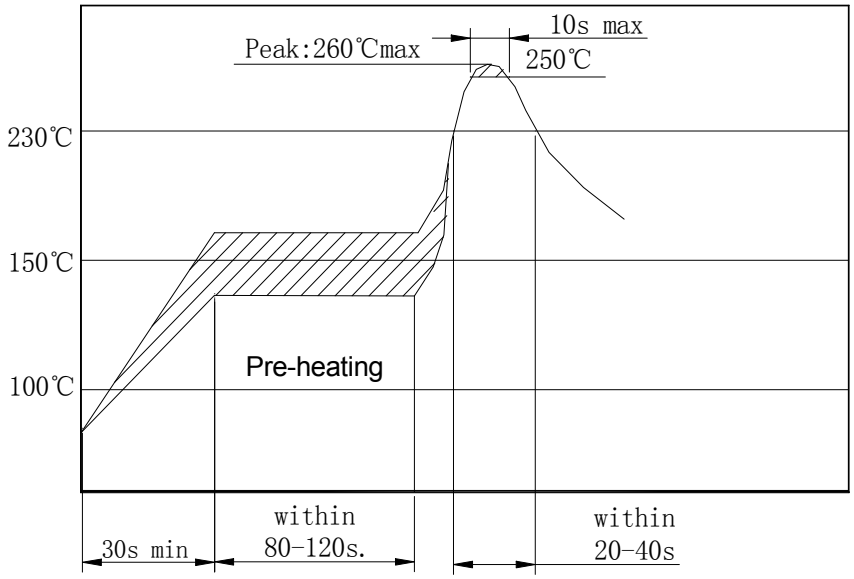
CHIP SUN TECHNOLOGY CO.，LTD.	
DESCRIPTION	SMD CERAMIC RESONATOR ZTTCR 8.00MHZ ±0.5%
DATE	June 24, 2020

9 RECOMMENDED LAND PATTERN AND REFLOW SOLDERING STANDARD CONDITIONS

9.1Recommended land pattern



9.2 Recommended reflow soldering standard conditions



CHIP SUN TECHNOLOGY CO.，LTD.	
DESCRIPTION	SMD CERAMIC RESONATOR ZTTCR 8.00MHZ ±0.5%
DATE	June 24, 2020