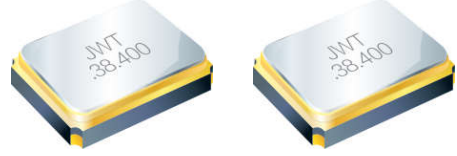


特点 Features

标准的1.6*1.2表面贴装形式
感温晶体
包装：每卷3000PCS

Typical 1.6 × 1.2mm SMD package
Temperature Sensing Crystals
Packing: Tape&Reel, 3000 pcs per Reel



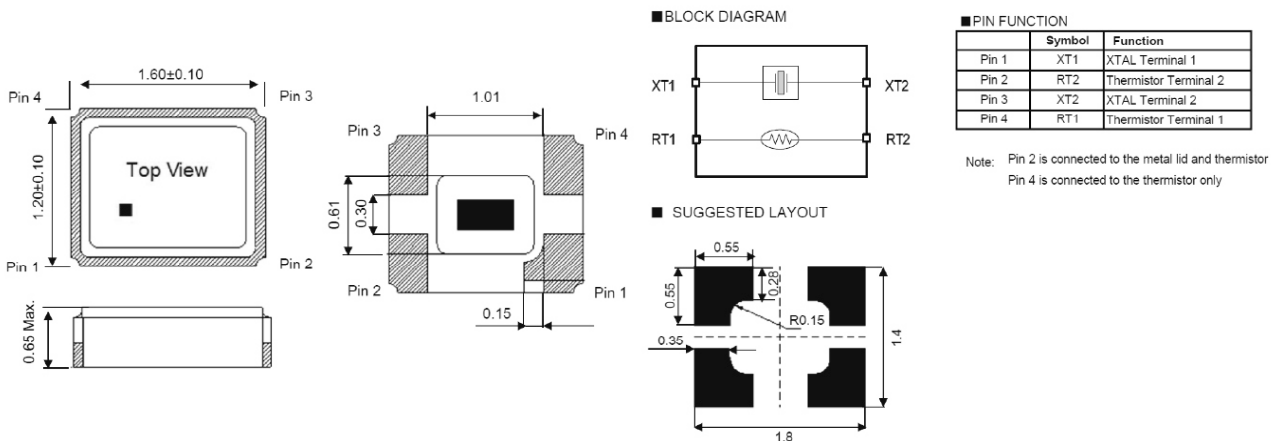
标准规格 Electronic Specification

型号 Type	TSX 1612
频率范围 Frequency Range	26 ~ 54 MHz
频率偏差 Frequency Tolerance (at 25° C)	± 10 ppm , or specify
频率稳定性 Frequency Stability Over Operating Temperature Range	± 10 ppm , or specify
工作温度范围 Operating Temperature Range	-30 ~85° C or specify
并联电容 Shunt Capacitance (CO)	3 pF Max.
激励功率 Drive Level	1 ~ 100 uW
负载电容 Load Capacitance	8 pF, 10 pF, 12 pF, or specify
年老化率 Aging (at 25° C)	± 3 ppm / year Max.
储存温度范围 Storage Temperature Range	-40 ~+85° C
热敏电阻电阻 Thermistor Resistance (25° C)	100 kΩ ± 1%
热敏电阻 B-常数 Thermistor B-constant (25~50° C)	4250kΩ ± 1%

等效电阻 Equivalent Series Resistance(E.S.R.)

频率范围 Frequency Range	等效电阻 ESR
26 ~ 54 MHz	100 Ω Max

外型尺寸 Outline Dimensions(Unit:mm)



特点 Features

标准的2.0*1.6表面贴装形式

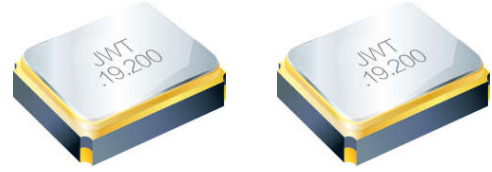
感温晶体

包装：每卷3000PCS

Typical 2.0 × 1.6mm SMD package

Temperature Sensing Crystals

Packing: Tape&Reel, 3000 pcs per Reel



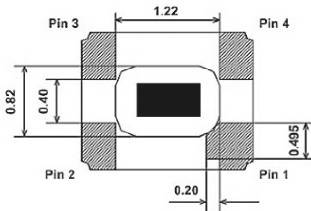
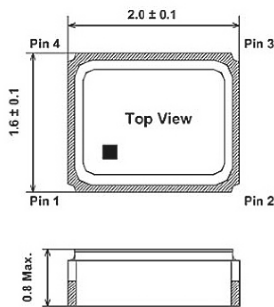
标准规格 Electronic Specification

型号 Type	TSX 2016
频率范围 Frequency Range	19.2 ~ 54 MHz
频率偏差 Frequency Tolerance (at 25° C)	± 10 ppm , or specify
频率稳定性 Frequency Stability Over Operating Temperature Range	± 10 ppm , or specify
等效串联电阻 Equivalent Series Resistance(ESR)	100 Ω Max
工作温度范围 Operating Temperature Range	-30 85° C or specify
并联电容 Shunt Capacitance (CO)	3 pF Max.
激励功率 Drive Level	1 ~ 200 uW (50 uW typical)
负载电容 Load Capacitance	8 pF, 10 pF, 12 pF, or specify
老化率 Aging (at 25° C)	± 3 ppm / year Max.
储存温度范围 Storage Temperature Range	-40 +85° C
热敏电阻电阻 Thermistor Resistance (25° C)	100 kΩ ± 1%
热敏电阻B-常数 Thermistor B-constant (25~50° C)	4250kΩ ± 1%

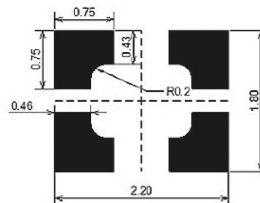
等效电阻 Equivalent Series Resistance(E.S.R.)

频率范围 Frequency Range	等效电阻 ESR
19.2 ~ 30 MHz	100 Ω Max
30 ~ 54 MHz	80 Ω Max

外型尺寸 Outline Dimensions(Unit:mm)



SUGGESTED LAYOUT



PIN FUNCTION

	Symbol	Function
Pin 1	XT1	XTAL Terminal 1
Pin 2	RT2	Thermistor Terminal 2
Pin 3	XT2	XTAL Terminal 2
Pin 4	RT1	Thermistor Terminal 1

Note:

Pin 2 is connected to the metal lid and thermistor
Pin 4 is connected to the thermistor only

特点 Features

标准的2.5*2.0表面贴装形式

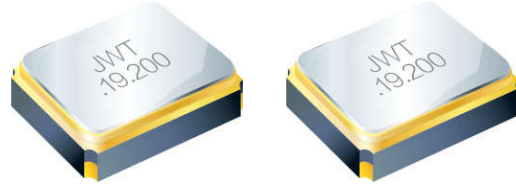
感温晶体

包装：每卷3000PCS

Typical 2.5 × 2.0mm SMD package

Temperature Sensing Crystals

Packing: Tape&Reel, 3000 pcs per Reel



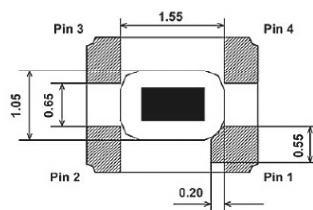
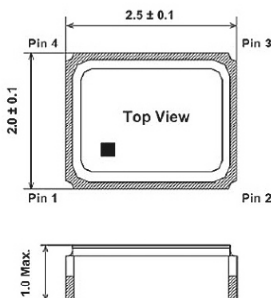
标准规格 Electronic Specification

型号 Type	TSX 2520
频率范围 Frequency Range	12 ~ 54 MHz
频率偏差 Frequency Tolerance (at 25° C)	± 10 ppm , or specify
频率稳定性 Frequency Stability Over Operating Temperature Range	± 10 ppm , or specify
等效串联电阻 Equivalent Series Resistance(ESR)	100 Ω Max
工作温度范围 Operating Temperature Range	-30 ~85° C or specify
并联电容 Shunt Capacitance (CO)	3 pF Max.
激励功率 Drive Level	1 ~ 200 uW (50 uW typical)
负载电容 Load Capacitance	8 pF, 10 pF, 12 pF, or specify
年老化率 Aging (at 25° C)	± 3 ppm / year Max.
储存温度范围 Storage Temperature Range	-40 ~+85° C
热敏电阻电阻 Thermistor Resistance (25° C)	100 kΩ ± 1%
热敏电阻B-常数 Thermistor B-constant (25~50° C)	4250kΩ ± 1%

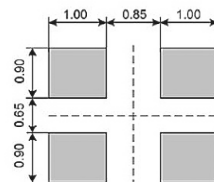
等效电阻 Equivalent Series Resistance(E.S.R.)

频率范围 Frequency Range	等效电阻 ESR
12 ~ 13 MHz	150 Ω Max
14 ~ 30 MHz	100 Ω Max
30 ~ 54 Mhz	60 Ω Max

外型尺寸 Outline Dimensions(Unit:mm)



SUGGESTED LAYOUT



PIN FUNCTION

	Symbol	Function
Pin 1	XT1	XTAL Terminal 1
Pin 2	RT2	Thermistor Terminal 2
Pin 3	XT2	XTAL Terminal 2
Pin 4	RT1	Thermistor Terminal 1

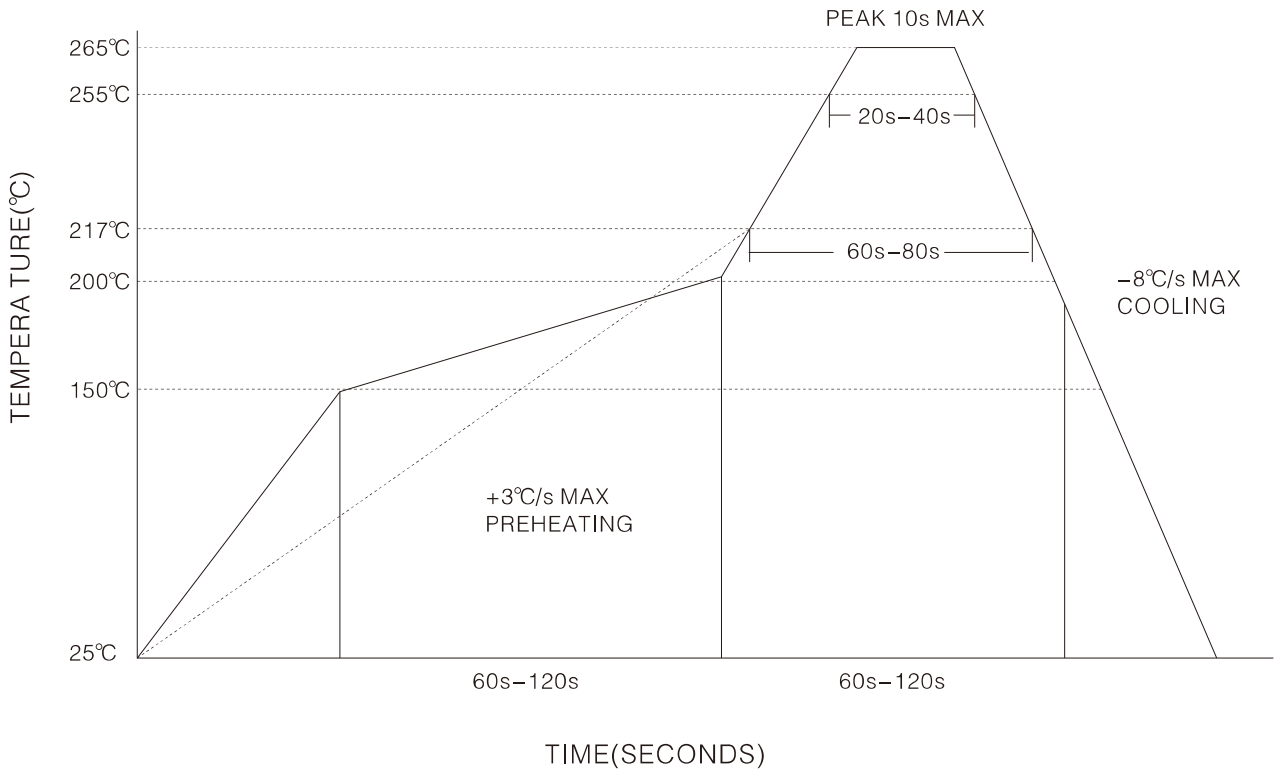
Note:
Pin 2 is connected to the metal lid and thermistor
Pin 4 is connected to the thermistor only

推荐的回流焊温度曲线

Recommend Reflow Temperature Profile

回流焊温度曲线 (适用SMD晶体及振荡器)

Reflow Temperature Profile (SMD X'tal and Oscillator)



焊锡熔点: 217 °C, 60 sec. Min.

峰值温度: 260 ± 5 °C, 10 sec. Max.(无铅)