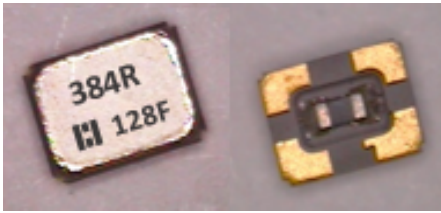


• TTSB Series Seam Sealing Thermistor Crystal



FEATURES

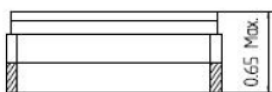
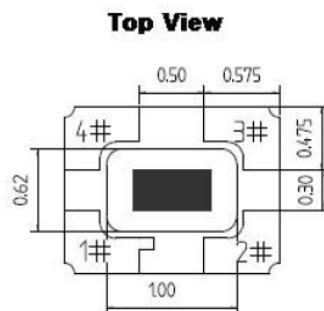
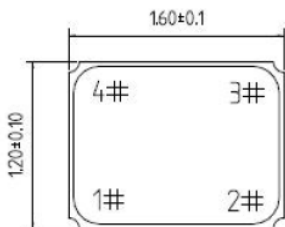
- Very Compact and thin (1.6*1.2*0.65mm max.)
- Crystal Units with Thermistor
- RF applications to replace VC-TCXO or TCXO product
- For Mobile Communications
- Lead-free. Meets the requirements for re-flow profiling using lead-free solder

Electrical Specifications

Item	Type	TTSB
Frequency Range	F0	38.4MHz/76.8MHz
Mode of Vibration		Fundamental
Load Capacitance	CL	7pF/8pF or specify
Frequency Tolerance	$\Delta F/F_0$	$\pm 10\text{ppm}$ (At 25°C)
Equivalent Series Resistance	ESR	80 Ω max. or specify
Temperature Stability	TC	$\pm 10\text{ppm}$, $\pm 20\text{ppm}$ Option(Refer to 25°C)
Operating Temperature Range	T _{OPR}	-30~+85°C, -40~+105°C Option
Storage Temperature Range	T _{STG}	-55~+125°C
Shunt Capacitance	C0	3pF max.
Insulator Resistance	IR	500M Ω min. (At 100VDC)
Drive Level	DL	50 μ W(100 μ W max.)
Aging	Fa	$\pm 2\text{ppm}$ max. (At 25°C, First year)
Packing Unit		3000pcs/reel

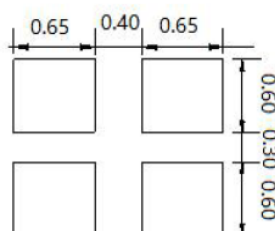
**Please contact us for inquiries regarding other Specifications

Mechanical Dimensions(mm)



PIN	Connection
#1,#3	X'TAL
#2	Thermistor ,GND , the metal LID
#4	Thermistor

Recommended Solder Pattern



Block diagram

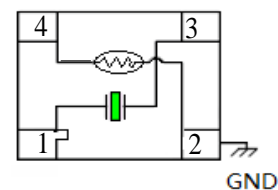


Table 1 NTC-Thermistor Specification

Resistance	100k Ω $\pm 1\%$ @25°C
B-Constant	4250k $\pm 1\%$ (25-50°C)

Table 2 PIN Connection

PIN	Connection
#1,#3	X'TAL
#2	Thermistor, GND, the metal LID
#4	Thermistor