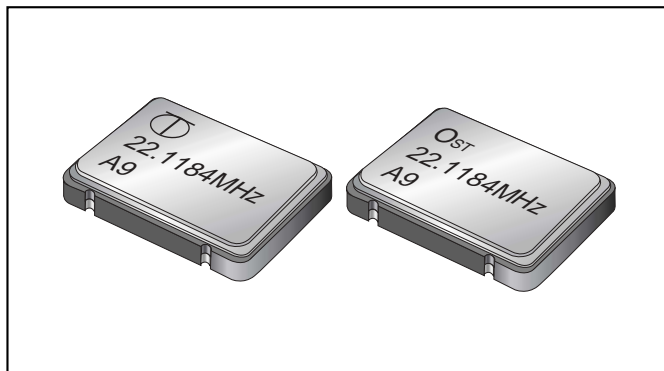


SURFACE MOUNT TYPE, CERAMIC PACKAGE METALIZED SURFACE


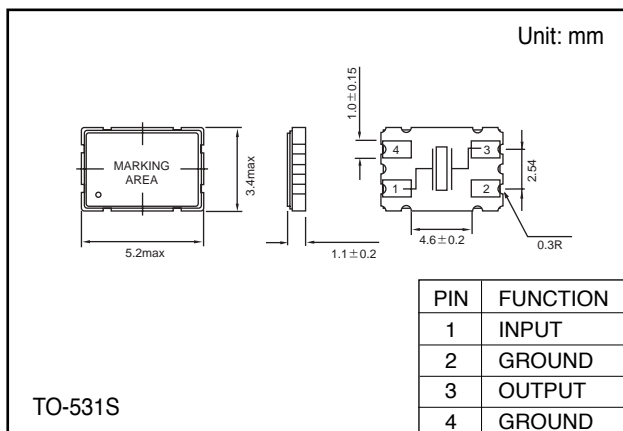
- Seam welding & glass welding
- Compact size, low profile
- Excellent solderability

ELECTRICAL SPECIFICATIONS

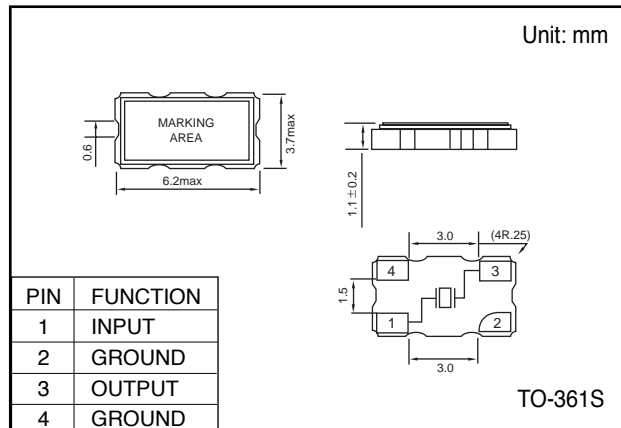
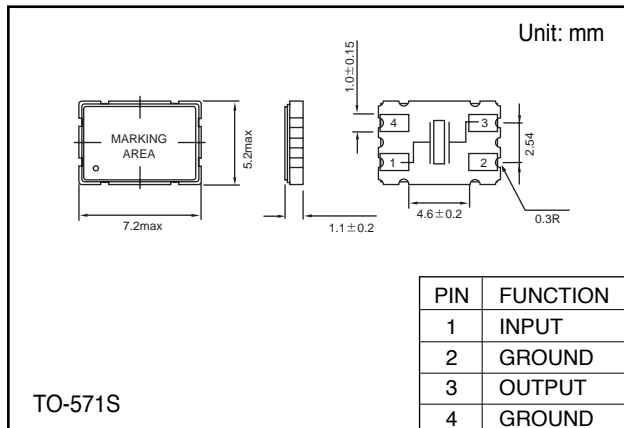
Frequency Range	8.0~36.0 MHz	27.0~100.0 MHz
Mode of Vibration	Fundamental	3rd Overtone
Resonance Resistance (Ω)	60 Max	80 Max
Frequency Tolerance at 25°C	± 10 ppm ~ ± 50 ppm	
Operating Temperature Range	-10°C~+70°C	
Load Capacitance(CL)	Customer Assign	
Shunt Capacitance	7.0pF Max	
Drive Level	0.1mWatts Max	
Infrared Reflow Conditions	240°C for 10s Max 2 reflows Max	
Aging (25°C)	± 5 ppm/year Max	

FREQUENCY TOLERANCE OVER TEMPERATURE RANGE

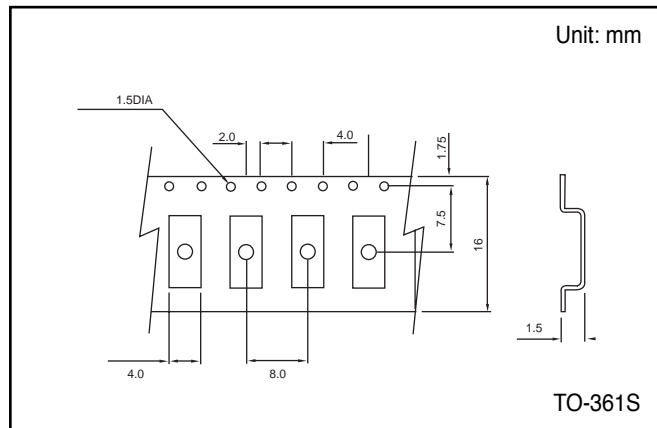
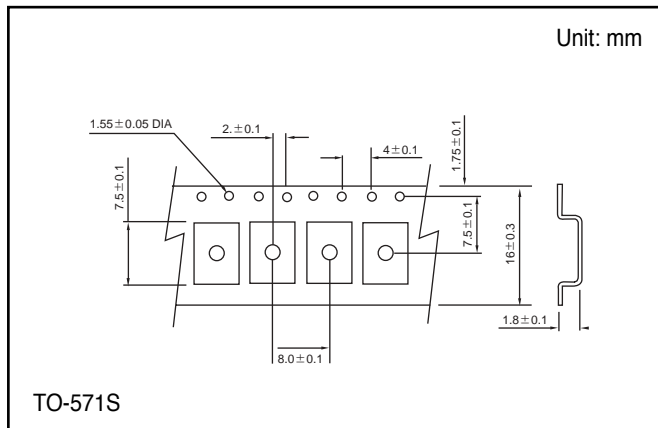
Temperature Range	Frequency Tolerance			
	10	20	30	50
0°C ~ +50°C	●	●	●	●
-10°C ~ +60°C	●	●	●	●
-20°C ~ +70°C		●	●	●
-40°C ~ +85°C			●	●

MECHANICAL DIMENSIONS


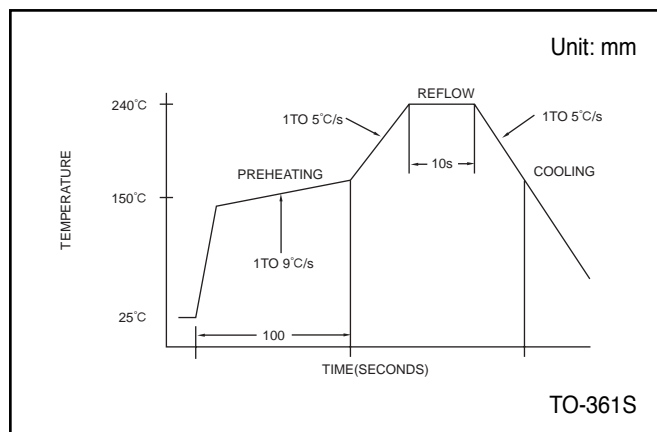
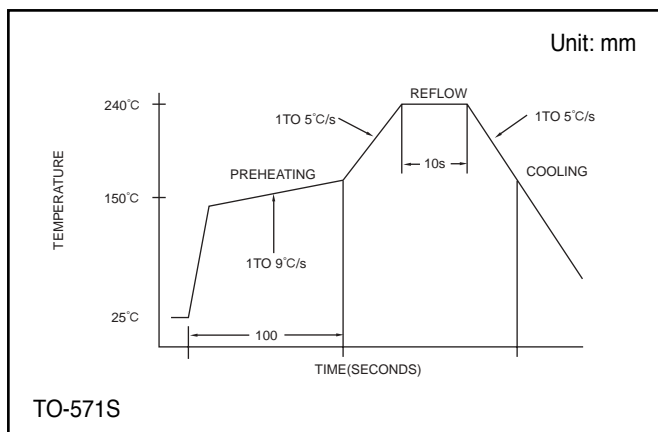
MECHANICAL DIMENSIONS



CARRIER TAPE DIMENSIONS

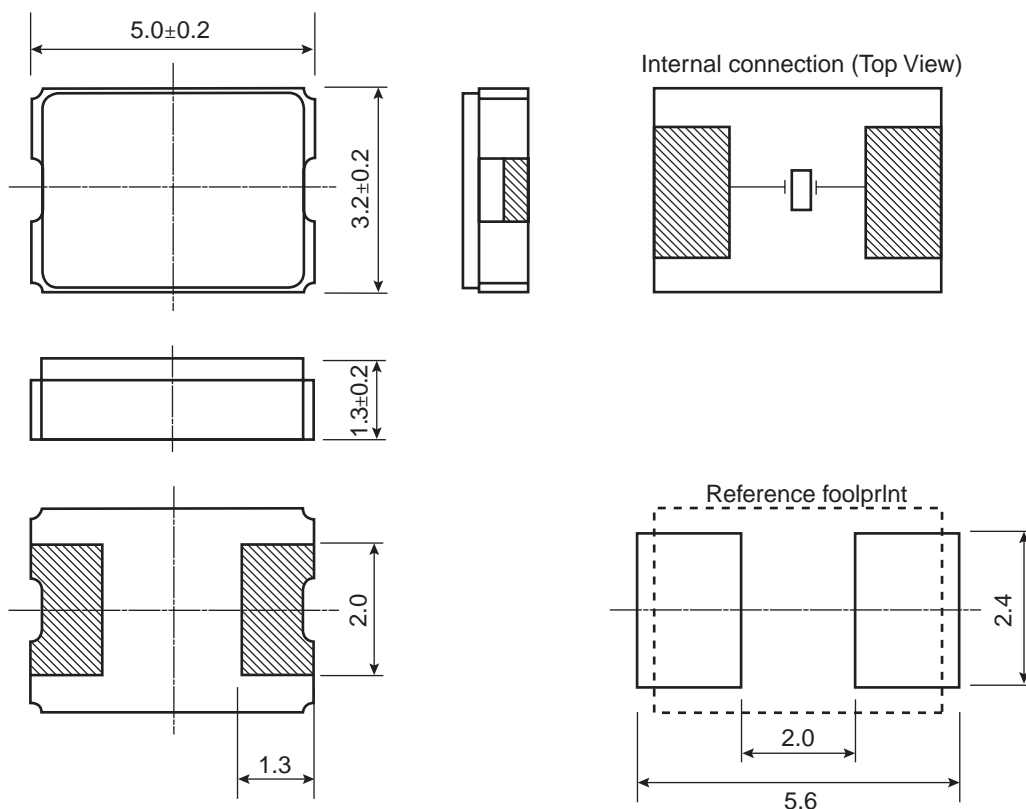


SOLDER REFLOW PROFILE



寸法 MARKING AND DIMENSIONS

(mm)

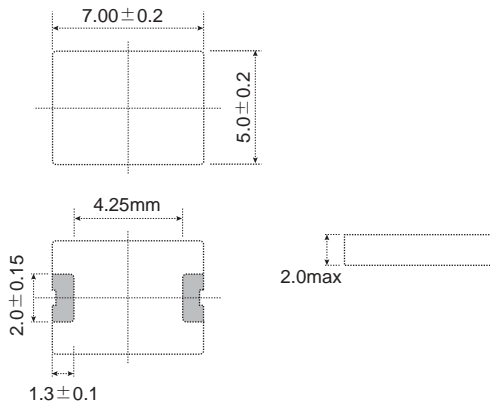

SPECIFICATIONS TO-531D

Type	TO-531D
Frequency Range	13.000~40.000MHz
Mode of Vibration	AT
Frequency Tolerance (at 25°C)	±15ppm~±50ppm
Frequency-Temperature Characteristics	±15ppm(-20°C~70°C); ±30ppm(-40°C~85°C)
Storage Temperature Range	-40°C~85°C
Equivalent Series Resistance (ESR)	See Table
Load Capacitance (CL)	10pf~32pf Series
Shunt Capacitance	<7pf
Insulation Resistance	>500MΩ At DC100V
Drive Level	10μw~100μw
Aging (Year)	±5ppm (Year)

FREQUENCIES vs EQUIVALENT SERIES RESISTANCE

Frequency(MHz)	Mode	ESR(Ω)
13.000MHz~30.000MHz	AT Fundamental	70Max
30.000MHz~40.000MHz	AT Fundamental	50Max
30.000MHz~44.999MHz	3rd overtone/AT	80Max
45.000MHz~89.999MHz	3rd overtone/AT	70Max
90.000MHz~110.000MHz	3rd overtone/AT	75Max

TO-571D DIMENSION (mm)



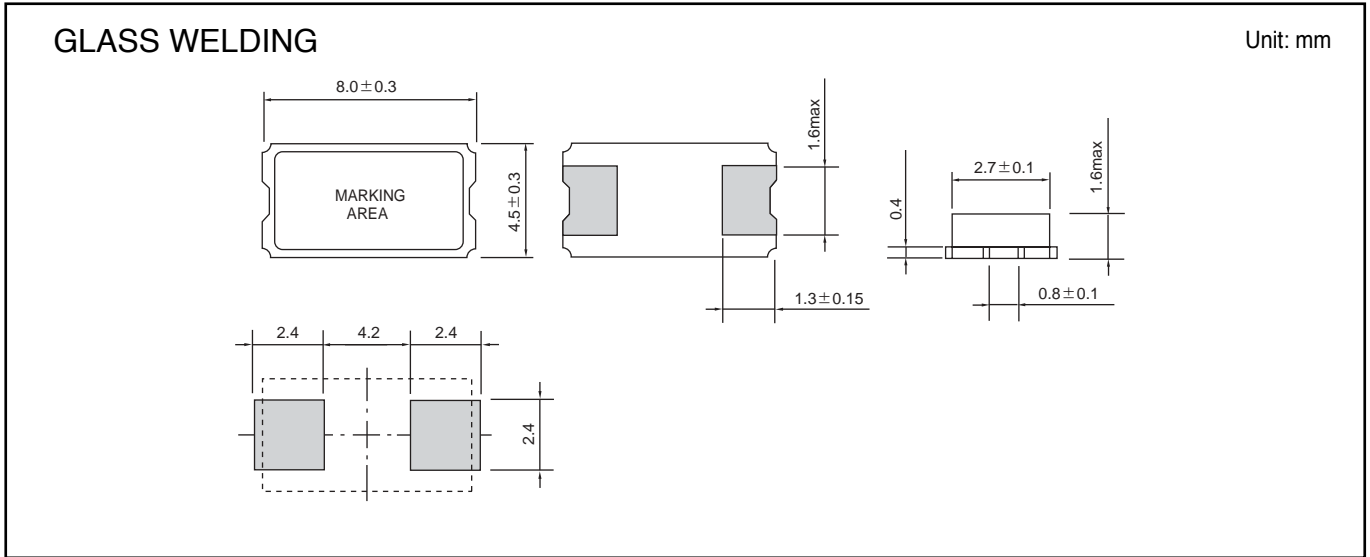
SPECIFICATIONS TO-531D

Type	TO-571D
Frequency Range	8.000~40.000MHz
Mode of Vibration	AT
Frequency Tolerance (at 25°C)	±15ppm~±50ppm
Frequency-Temperature Characteristics	±15ppm(-20°C~70°C); ±30ppm(-40°C~85°C)
Storage Temperature Range	-40°C~85°C
Equivalent Series Resistance (ESR)	See Table
Load Capacitance (CL)	10pf~32pf Series
Shunt Capacitance	<7pf
Insulation Resistance	>500MΩ At DC100V
Drive Level	10μw~100μw
Aging (Year)	±5ppm (Year)

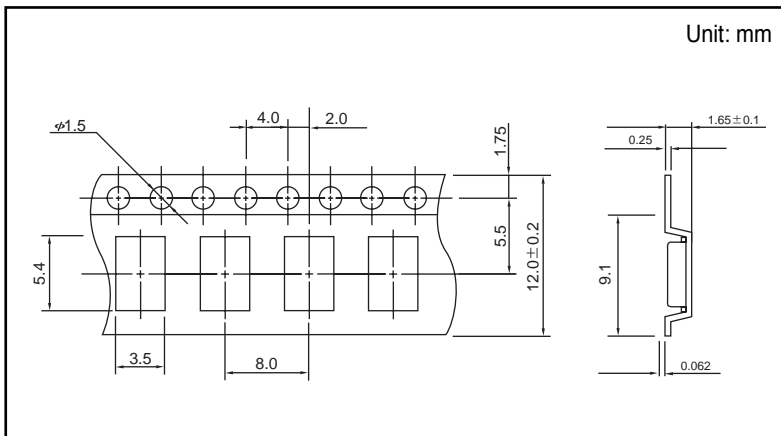
FREQUENCIES vs EQUIVALENT SERIES RESISTANCE

Frequency(MHz)	Mode	ESR(Ω)
8≤f<40	AT Fundamental	80~40
12≤f<40	AT Fundamental	
40≤f<82	3rd overtone/AT	≤80
50≤f<80	3rd overtone/AT	

■ DIMENSIONS



■ CARRIER TAPE DIMENSIONS



● FEATURES

1. Low in height (1.6mm max) suitable for thin equipment.
2. Compact design makes high - density surface mounting possible.
3. Improves equipment characteristics in high frequency applications (fundamental up to 45MHz).
4. Provides temperature characteristics with high precision.
5. Ceramic package assures fine accuracy and high reliability.
6. Automatic mounting by taping and re - flow soldering can be accommodated.

■ SOLDER REFLOW PROFILE

