SHOULDER

SMD0503(4P & 2P) Crystal

Lead

ELECTRICAL SPECIFICATION

Frequency Range	8.0000 to 110.000 MHz
Load Capacitance	10pF to series
Frequency Tolerance (at 25°C)	±30ppM Maximum
Oscilation Mode	Fundamental, Third Overtone
Frequency Stability in Temperature	±30ppM Maximum
Operating Temperature Range	-20 $^{\circ}$ C to +70 $^{\circ}$ C Standard (or Optional)
Storage Temperature Range	-40°C to +85°C
Equivalent Series Resistance (ESR)	See ESR Table
Drive Level	10~100uW
Shunt Capacitance	7pF Maximum
Aging (at 25°C)	±3ppM per year
Insulation Resistance	500 MOhm Minimum

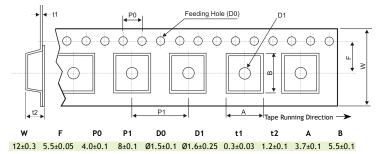
FREQUENCY RANGE AND OSCILLATION MODE

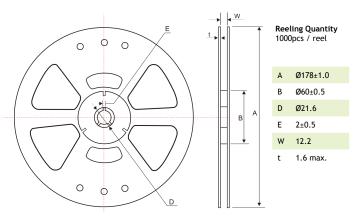
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Fundamental (F)	8.0000 to 40.000MHz
Third Overtone (30T)	40.000 to 110.000MHz
ESR TABLE (Ohms)	
8.0000 to 12.000MHz	100Max
12.000 to 16.000MHz	80Max
16.000 to 20.000MHz	70Max
20.000 to 24.000MHz	60Max
24.000 to 40.000MHz	50Max
40.000 to 110.000MHz	80Max

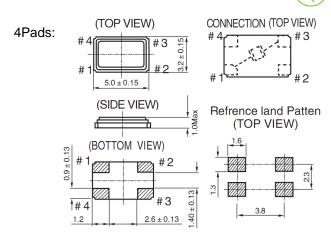
9 0000 to 40 000MI

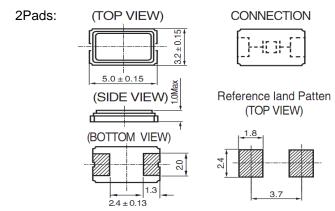
TAPE SPECIFICATIONS (all in mm) - Carrier Tape Dimensions



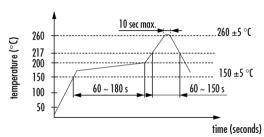


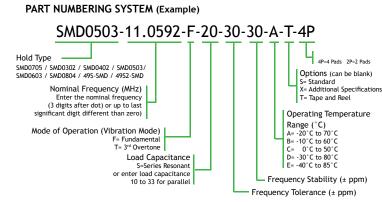
MECHANICAL DIMENSIONS (all in mm)





SOLDERING





SHOULDER CHINA

/ww.shoulder.cn