

QUARTZ CRYSTAL UNIT



SERIES 6K, CYLINDER CRYSTAL

FEATURE

- Wide Frequency range
- High shock tolerance
- Small size
- Reliable frequency stability

APPLICATIONS

- Microprocessor Systems
- Consumer Electronics
- Instrumentation
- Automotive electronics

ELECTRICAL SPECIFICATIONS

Hold Type	$\Phi 3 \times 10$	$\Phi 3 \times 9 / \Phi 3 \times 8$
	3.579MHz ~ 4.000MHz	4.000MHz~50MHz
Frequency	3.579MHz ~ 50MHz	
Oscillator mode	See Table	
Frequency Tolerance (at 25°C)	±10ppm, ±20ppm, ±30ppm or specify	
ESR	See Table	
Frequency Stability	See Table	
Storage Temperature Range	-40 °C to + 85 °C	
Operating Temperature Range	-10 °C to + 60 °C -20 °C to +70 °C -40 °C to +85 °C	
Shunt Capacitance (C ₀)	5.0pF Typ	
Driver Level (Typical)	10 ~ 100 μW Max	
Load Capacitance(C _L)	12PF, 16PF, 18PF, 20PF or Specify	
Insulation Resistance	500MΩ AT DC100V Min	
Aging @25°C 1 st year (Max)	±3ppm/year	

REMARK: SPECIFICATIONS SUBJECT TO CHANGE WITHOUT PRIOR NOTICE. PLEASE CONFIRM WITH OUR SALES ENGINEER.

EQUIVALENT SERIES RESISTANCE(ESR) AND OSCILLATION MODE

Frequency Range	E.S.R (Ω)	Mode	Frequency Range	E.S.R (Ω)	Mode
3.579MHz~3.999MHz	180Max	Fundamental/AT	7.000MHz~9.999MHz	80Max	Fundamental/AT
4.000MHz~4.499MHz	150Max	Fundamental/AT	10.000MHz~11.999MHz	60Max	Fundamental/AT
4.500MHz~4.999MHz	120Max	Fundamental/AT	12.000MHz~29.999MHz	40Max	Fundamental/AT
5.000MHz~6.999MHz	100Max	Fundamental/AT	30.000MHz~50.000MHz	80Max	3rd Overtone /AT

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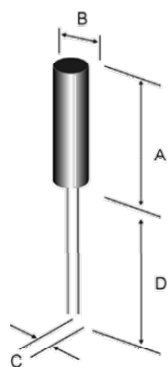
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FREQUENCY STABILITY VS OPERATING TEMPERATURE RANGE

Temperature Range	Frequency Stability					
	+/-10ppm	+/-15ppm	+/-20ppm	+/-25ppm	+/-30ppm	+/-50ppm
-10°C to +60°C	✓	✓	✓	✓	✓	✓
-20°C to +70°C			✓	✓	✓	✓
-40°C to +85°C						✓

PACKING AND DIMENSIONS



See table 1



MODEL	A	B	C	D	E
3x8mm	8.3	3.1	1.1	10.0	0.3
3x9mm	9.3	3.1	1.1	10.0	0.3
3 x10mm	10.1	3.1	1.1	10.0	0.3

PART NUMBER

6K10-	16 Frequency e.g. 16:16MHz	20 Load capacitance e.g. 20:20pf s:series	30 Frequency tolerance e.g. 30:±30ppm	60 E.S.R.max e.g. 100:100Ωmax	F Oscillate mode F:Fundamental 3:3rd overtone 5:5th overtone	A Operating temperature range A:-10-60°C B:-20-70°C C:-40-85°C	50 Temperature stability: e.g. 50:±50ppm
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