

## AT-41 / AT-41CD2

For OA / AV

### ■ Features

A highly stable and reliable low-height crystal unit with a metallic package, also suitable for surface mounting.

- Compatible with surface mounting.
- Airtight metal package ensures high-reliability.
- Taping package is for customer automatic loading operation.
- AT-41CD2 meets the requirements for re-flow profiling using lead-free solder.



Pb Free

RoHS Compliant  
Directive 2011/65/EU

### ■ Specifications

Item	Model	AT-41			AT-41CD2		
		3 to 37MHz	26 to 60MHz	60 to 75MHz	3 to 37MHz	26 to 60MHz	60 to 75MHz
Nominal Frequency		3 to 37MHz	26 to 60MHz	60 to 75MHz	3 to 37MHz	26 to 60MHz	60 to 75MHz
Overtone Order		Fundamental	3rd overtone		Fundamental	3rd overtone	
Frequency Tolerance (25 ±3 °C)		±20 × 10 <sup>-6</sup>			±20 × 10 <sup>-6</sup>		
Frequency versus Temperature Characteristics (with reference to +25 °C)		±30 × 10 <sup>-6</sup>			±30 × 10 <sup>-6</sup>		
Operating Temperature Range		-10 to +70 °C			-10 to +70 °C		
Storage Temperature Range		-40 to +85 °C			-40 to +85 °C		
Equivalent Series Resistance		Refer to *1			Refer to *1		
Level of Drive		Refer to *2 (Max. 1000 μW)			Refer to *2 (Max. 1000 μW)		
Load Capacitance		16 pF	Series resonance		16 pF	Series resonance	
Specifications Number		STD-LPH-9	STD-LPH-10	STD-LPH-11	LN-L-0002	STD-LPH-3	STD-LPH-5

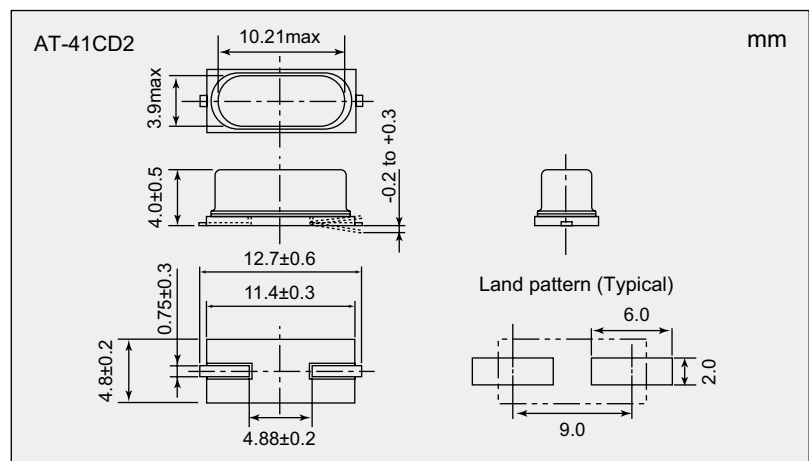
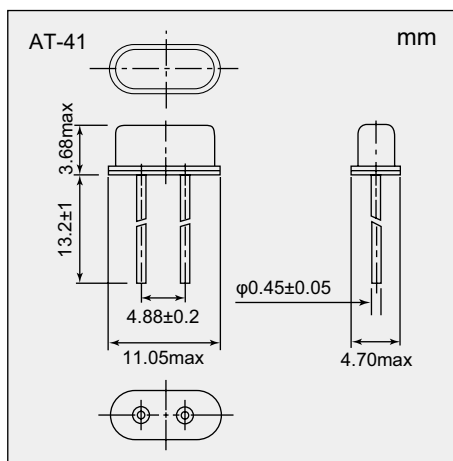
\*1 Equivalent Series Resistance

Overtone Order	Nominal Frequency (MHz)	Equivalent Series Resistance max. [Ω]
Fundamental	3 to 3.2	400
	3.2 to 3.5	200
	3.5 to 4	150
	4 to 4.5	120
	4.5 to 5	100
	5 to 6	80
	6 to 8	70
	8 to 10	60
	10 to 12	50
3rd overtone	12 to 37	40
	26 to 35	140
	35 to 48	100
	48 to 75	80

\*2 Drive Level

Overtone Order	Nominal Frequency (MHz)	Drive Level (μW)
Fundamental	3 to 5	500
	5 to 37	50
3rd overtone	26 to 60	500
	60 to 75	10

### ■ Dimensions



Please specify the model name, frequency, and specification number when you order products.  
For further questions regarding specifications, please feel free to contact us.