

AT-41 / AT-41CD2

For OA / AV

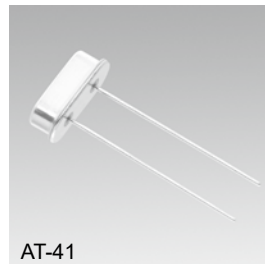
■ Features

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
Directive (EU) 2015/863



■ Specifications

Item	Model	AT-41			AT-41CD2			AT-41 / AT-41CD2	
		Standard			Standard			Optional	
Nominal Frequency (MHz)		3 ≤ F ≤ 37	26 ≤ F < 60	60 ≤ F ≤ 75	3 ≤ F ≤ 37	26 ≤ F < 60	60 ≤ F ≤ 75	4 ≤ F ≤ 37	26 ≤ F ≤ 40
Overtone Order		Fundamental	3rd overtone		Fundamental	3rd overtone		Fundamental	3rd overtone
Frequency Tolerance (25 ±3 °C)		±20 × 10 ⁻⁶			±20 × 10 ⁻⁶			±20 × 10 ⁻⁶	
Frequency versus Temperature Characteristics (with reference to +25 °C)		±30 × 10 ⁻⁶			±30 × 10 ⁻⁶			±30 × 10 ⁻⁶	
Operating Temperature Range (°C)		-10 to +70			-10 to +70			-40 to +85	
Storage Temperature Range (°C)		-40 to +85			-40 to +85			-40 to +85	
Equivalent Series Resistance		Refer to *1			Refer to *1			Refer to *1	
Level of Drive (µW)		Refer to *2 (Max. 1000)			Refer to *2 (Max. 1000)			Refer to *2	
Load Capacitance (pF)		16	Series resonance		16	Series resonance		6 to 32	
Frequency Aging (+25 °C)		---			---			Max. ±5 × 10 ⁻⁶ / year *3	
Specifications Number		STD-LPH-9	STD-LPH-10	STD-LPH-11	LN-L-0002	STD-LPH-3	STD-LPH-5	Refer to *4	

*1 Equivalent Series Resistance

Overtone Order	Nominal Frequency (MHz)	ESR Max. (Ω)
Fundamental	3 ≤ F < 3.2	400
	3.2 ≤ F < 3.5	200
	3.5 ≤ F < 4	150
	4 ≤ F < 4.5	120
	4.5 ≤ F < 5	100
	5 ≤ F < 6	80
	6 ≤ F < 8	70
	8 ≤ F < 10	60
	10 ≤ F < 12	50
3rd overtone	26 ≤ F < 35	140
	35 ≤ F < 48	100
	48 ≤ F ≤ 75	80

*2 Level of Drive

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

Please specify the model name, frequency, and specification number when you order products.

For further questions regarding specifications, please feel free to contact us.

*3 If you have any other requests, NDK will study it.

*4 Ordering information: Overtone Order Fundamental / 3rd Overtone, the Operating Temperature Range, Frequency versus Temperature Characteristics, Frequency Tolerance, and Load Capacitance.

Ex. Model, Frequency (24.000000MHz 6digits), S1: Fundamental or S3 : 3rd overtone
 – Operating Temperature Range (-40 to +85°C) – Frequency versus Temperature Characteristics (±30 × 10⁻⁶)– Frequency Tolerance (±20 × 10⁻⁶) – Load Capacitance (10pF)
 AT-41
 24.000000MHz
 S1-4085-30-20-10

■ Dimensions

