

COMMUNICATION CRYSTALS

ULTRA MINIATURE • UM-1 • UM-4

ABU, ABU4



RoHS
Compliant



7.8 x 3.1 x 8.0 mm

FEATURES:

- Compact size.
- High precision crystal.
- Hermetically sealed.
- Excellent frequency temperature characteristics across a wide temperature range.

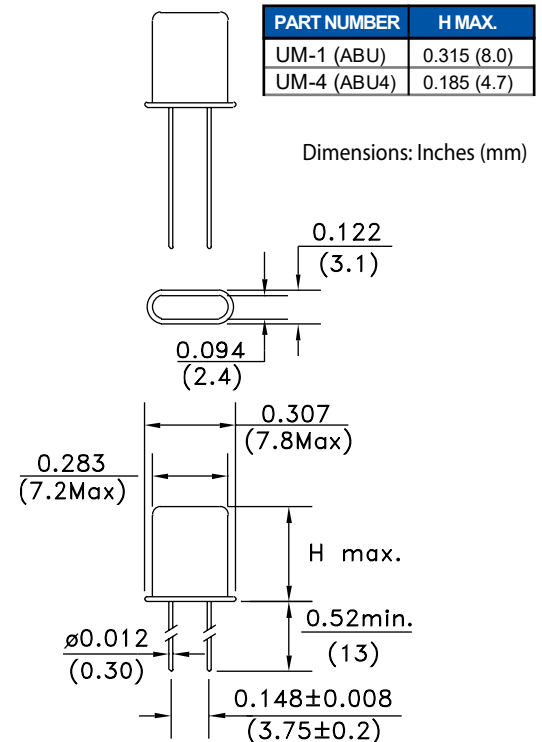
APPLICATIONS:

- Pagers
- Hand-held phones
- Cordless phones
- Communication equipment

STANDARD SPECIFICATIONS:

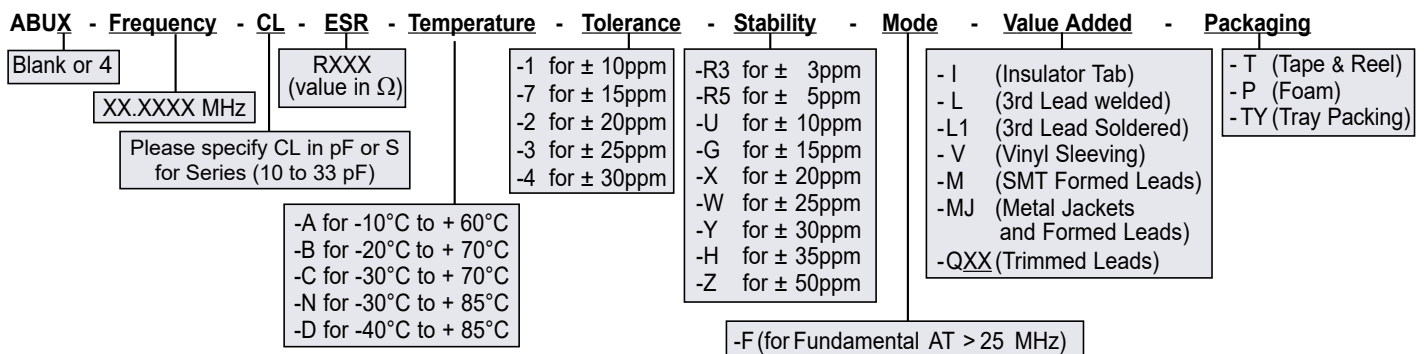
PARAMETERS	ABU (UM-1)	ABU4 (UM-4)
Frequency Range	6MHz - 200MHz	10MHz - 200MHz
Operation Mode	6.00MHz ≤ F ≤ 25.00MHz (Fundamental) 25.0MHz < F < 72.0MHz (3rd overtone) 72.00MHz < F < 160.0MHz (5th overtone) 160.0MHz ≤ F ≤ 200.00MHz (7th overtone)	
Operating Temperature	0°C to +70°C (See Options)	
Storage Temperature	-40°C to +125°C	
Frequency Tolerance @ 25°C	±50ppm max. (See Options)	
Frequency Stability over Temp.	±50ppm max. (See Options)	
Equivalent Series Resistance (ESR)	120 Ω max. for 6.0MHz < F < 7.0MHz	
	100 Ω max. for 7.0MHz ≤ F < 8.0MHz	
	80 Ω max. for 8.0MHz ≤ F < 10.0MHz	
	60 Ω max. for 10.0MHz ≤ F < 11.0MHz	
	50 Ω max. for 11.0MHz ≤ F < 12.0MHz	
	40 Ω max. for 12.0MHz ≤ F < 14.0MHz	
	30 Ω max. for 14.0MHz ≤ F ≤ 25.0MHz	
Fundamental		
3rd Overtone	70 Ω max. for 25.0MHz ≤ F < 72.0MHz	
5th Overtone	100 Ω max. for 72.0MHz ≤ F < 160.0MHz	
7th Overtone	140 Ω max. for 160.0MHz ≤ F ≤ 200.0MHz	
Shunt Capacitance C ₀	7pF max.	
Load Capacitance C _L	18pF (See Options)	
Drive Level	1mW max., 100μW correlation	
Aging @ 25°C First Year	±3ppm max. (tighter aging available)	
Insulation Resistance	500M Ω min. at 100Vdc ±15V	

OUTLINE DIMENSIONS



OPTIONS & PART IDENTIFICATION:

(Left blank if standard)



ATTENTION: Abracon LLC's products are COTS – Commercial-Off-The-Shelf products; suitable for Commercial, Industrial and, where designated, Automotive Applications. Abracon's products are not specifically designed for Military, Aviation, Aerospace, Life-dependant Medical applications or any application requiring high reliability where component failure could result in loss of life and/or property. For applications requiring high reliability and/or presenting an extreme operating environment, written consent and authorization from Abracon LLC is required. Please contact Abracon LLC for more information.