

# CERAMIC SMD ULTRA MINIATURE QUARTZ CRYSTAL



5.0 x 3.2 x 1.3mm

**ABM3C**

Pb in glass  
(Exempt per RoHS 2002/95/EC Annex (5)) **RoHS Compliant**

Moisture Sensitivity Level – MSL – N/A (The ABM3C Series is a Hermetically Sealed device and not moisture sensitive)

## FEATURES:

- Low in height; suitable for thin in equipment.
- Glass sealed package assures high reliability and high temperature operation
- Tight tolerance and stability available.
- Suitable for RoHS reflow profile

## APPLICATIONS:

- Automotive applications
- High density applications.
- Modems, communication and test equipment.
- PCMCIA, Wireless applications

## STANDARD SPECIFICATIONS:

Parameters	Minimum	Typical	Maximum	Units	Notes
Frequency Range	10.000	-----	50.000	MHz	Fundamental
Operation Mode	Fundamental				
Operating Temperature	-10	-----	+70	°C	See options
Storage Temperature	-40	-----	+90	°C	
Frequency Tolerance @+25°C	-50	-----	+50	ppm	See options
Frequency Stability over the Operating Temperature ( ref. to +25°C)	-50	-----	+50	ppm	See options
Equivalent series resistance (R1)	-----	-----	60	Ω	10.000 – 15.999MHz
	-----	-----	50		16.000 – 50.000MHz
Shunt capacitance (C0)	-----	-----	7	pF	
Load capacitance (CL)	-----	18	-----	pF	Standard (See options if other than STD)
Drive Level	-----	10	100	μW	
Aging	-5	-----	+5	ppm	@25°C±3°C First year
Insulation Resistance	500	-----	-----	MΩ	@ 100Vdc ± 15V

## OPTIONS & PART IDENTIFICATION:

(Left blank if standard)

ABM3C -  MHz -  -  -  -

**Frequency in MHz**  
Please specify the frequency in MHz.  
e.g. 14.31818MHz

**Load Capacitance (pF)**  
Please specify CL in pF or S for series

**Custom ESR if other than standard**  
R□  
□: Specify a value in Ω (e.g.: R40)

**Operating Temp.**

E: 0°C ~ +70°C
B: -20°C ~ +70°C
C: -30°C ~ +70°C
N: -30°C ~ +85°C
D: -40°C ~ +85°C
J(**): -40°C ~ +105°C
K(***): -40°C ~ +125°C

**Freq. Tolerance**

2: ± 20 ppm
3: ± 25 ppm
4: ± 30 ppm

**Packaging**

Blank: Bulk
T: Tape & Reel

**Freq. Stability**

Y*: ± 30 ppm
H*: ± 35 ppm
A**: ± 80 ppm
Q**: ± 100 ppm
V: ± 120 ppm

\* Standard temp. or option E, B, C, N, D only  
\*\* Stability option Q and V only  
\*\*\* Stability option V only



