



**THE DATASHEET OF
ABM3C-15.000MHZ-D4Y-T**



CERAMIC SMD CRYSTAL



ABM3C

RoHS/RoHS II Compliant

5.0 x 3.2 x 1.3mm

ABM3C Series products with the Date Code/Traceability Code marking ending in "X" are Glass-Sealed and the following RoHS Exemption applies: Pb in Glass, exemption 7C-I per RoHS II Directive 2011/65/EU Annex

ABM3C Series products with the Date Code/Traceability Code marking ending in "C" and "F" are Seam-Sealed and are Pb-Free.

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

➤ **FEATURES:**

- Low height; suitable for thin equipment.
- New seam sealed package available (code "C")
- Tight tolerance and stability available.
- Suitable for RoHS compliant reflow profile

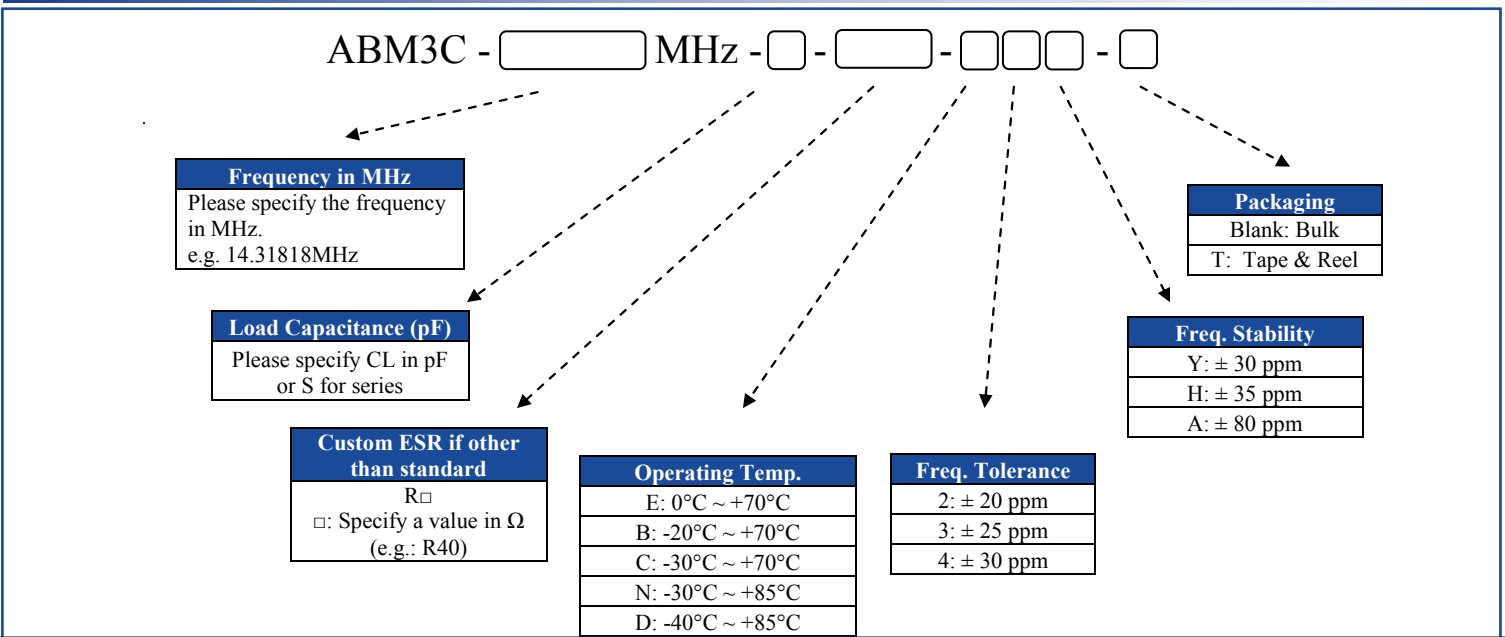
➤ **APPLICATIONS:**

- 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)



CERAMIC SMD CRYSTAL

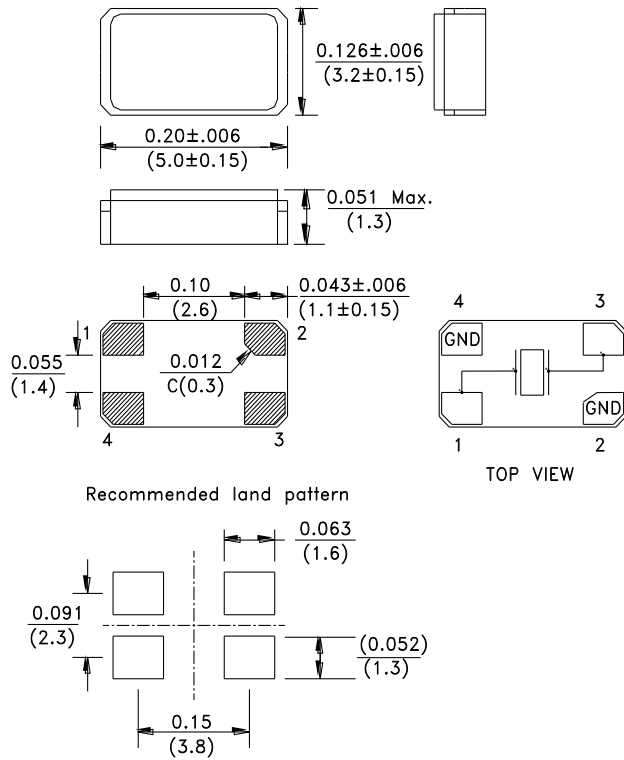


RoHS/RoHS II Compliant

5.0 x 3.2 x 1.3mm

ABM3C

OUTLINE DRAWING:



Sealing Method :

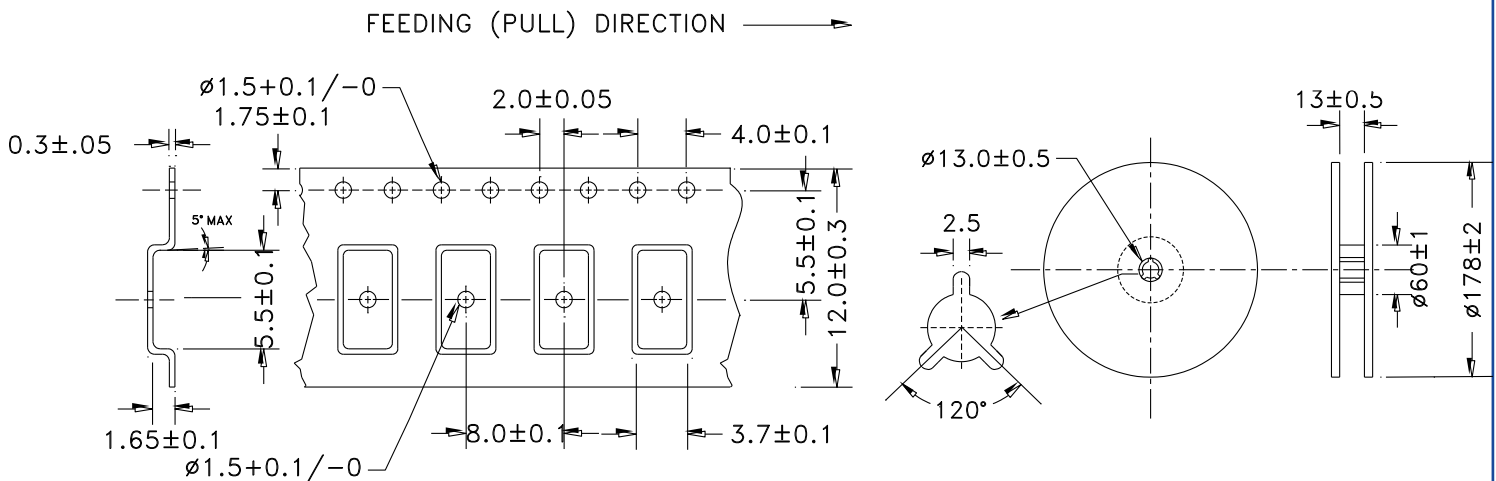
Glass Sealing for parts with Traceability Code ending in "X"
Seam Sealing for parts with Traceability Code ending in "C" and "F"

Note: Due to material availability, the chamfer could be located on pin #1 or #2. Be advised that the chamfer location has no impact on the electrical performance of the device.

Dimensions: inches (mm)

TAPE & REEL:

1000pcs/reel



Dimensions: mm



REFLOW PROFILE:

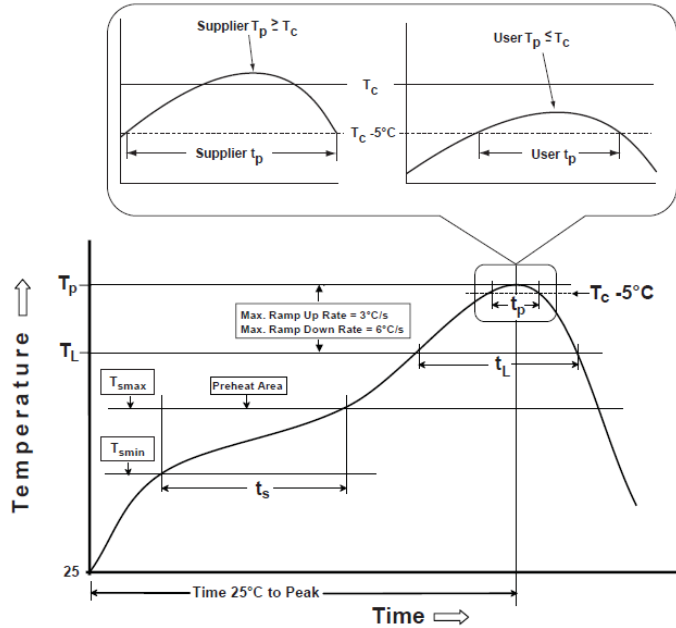


Table 1

SnPb Eutectic Process Classification Temperatures (T _c)		
Package Thickness	Volume mm ³ <350	Volume mm ³ >350
<2.5 mm	235 °C	220 °C
>2.5 mm	220 °C	220 °C

Table 2

Pb-Free Process Classification Temperatures (T _c)			
Package Thickness	Volume mm ³ <350	Volume mm ³ 350-2000	Volume mm ³ >2000
<1.6 mm	260 °C	260 °C	260 °C
1.6 mm - 2.5 mm	260 °C	250 °C	245 °C
>2.5 mm	250 °C	245 °C	245 °C

Profile Feature	Sn-Pb Eutectic Assembly	Pb-Free Assembly
Preheat / soak		
Temperature minimum (T _{smin})	100°C	150°C
Temperature maximum (T _{smax})	150°C	200°C
Time (T _{smin} to T _{smax}) (t _s)	60 - 120 sec.	60 - 120 sec.
Average ramp-up rate (T _{smax} to T _p)	3°C/sec. max	3°C/sec. max
Liquidous temperature (T _L)	183°C	217°C
Time at liquidous (t _L)	60 - 150 sec.	60 - 150 sec.
Peak package body temperature (T _p)*	see Table 1	see Table 2
Time (t _p)** within 5°C of the specified classification temperature (T _c)	20 sec.	30 sec.
Ramp-down rate (T _p to T _{smax})	6°C/sec. max	6°C/sec. max
Time 25°C to peak temperature	6 min. max	8 min. max
Reflow cycles	2 max	2 max

*Tolerance for peak profile temperature (T_p) is defined as a supplier minimum and a user maximum.

**Tolerance for time at peak profile temperature (t_p) is defined as supplier minimum and a user maximum.

ATTENTION: Abracon Corporation'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 Corporation is required. Please contact Abracon Corporation for more information.

Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

- ⊖ [View ABM3C-15.000MHZ-D4Y-T on WIN SOURCE](#)
- ⊖ [Abracon LLC Information](#)

Optimize Your Supply Chain with WIN SOURCE Solutions

- ✓ Global Sourcing Solution
- ✓ Obsolete Management
- ✓ Cost Control Management
- ✓ Shortage Management
- ✓ Alternative Solution
- ✓ Excess Inventory Management