



**THE DATASHEET OF
ABM8-20.000MHZ-D2Y-T**



CERAMIC SMD CRYSTAL



ABM8

Moisture Sensitivity Level (MSL) – This product is Hermetically Sealed and not Moisture Sensitive-MSL = N/A: Not Applicable



RoHS
Compliant

3.2 x 2.5 x 0.8mm

FEATURES:

- Seam sealed package assures high reliability
- Tight tolerance and stability available
- Suitable for RoHS reflow

APPLICATIONS:

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

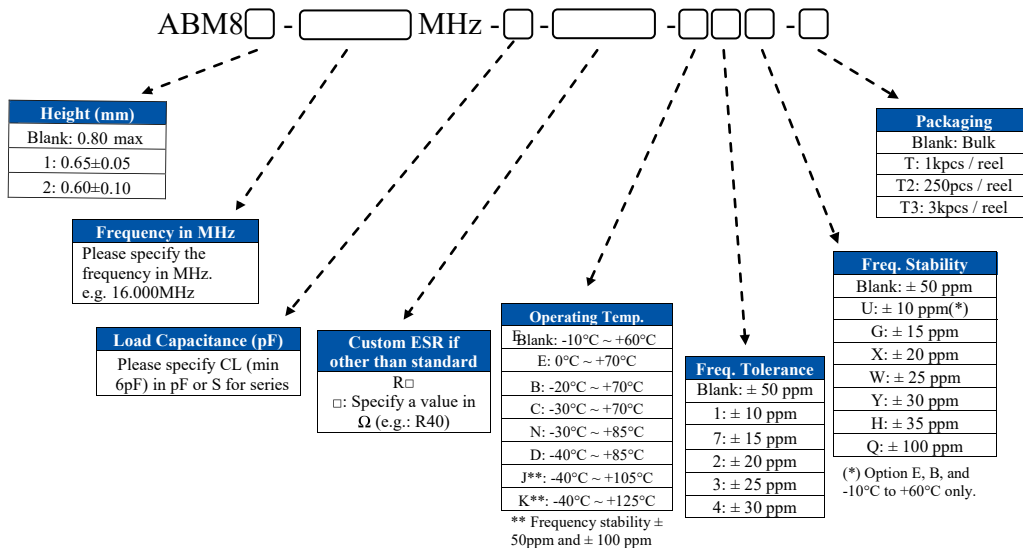
STANDARD SPECIFICATIONS:

Parameters	Minimum	Typical	Maximum	Units	Notes
Frequency Range	8.000		125.000*	MHz	Contact Abracon for available F<10MHz
Operation Mode	Fundamental				8MHz - 54MHz
	3rd Overtone (Standard Frequencies: 64, 66, 66.6666, 75, 80, 98.304, 100, 125MHz)				64MHz - 125MHz Please contact Abracon for available frequencies
Operating Temperature	-10		+60	°C	Standard (see options if other than STD)
Storage Temperature	-55		+125	°C	
Frequency Tolerance @+25°C	-50		+50	ppm	Standard (see options if other than STD)
Frequency Stability over the Operating Temperature (ref. to +25°C)	-50		+50	ppm	Standard (see options if other than STD)
Equivalent series resistance (R1)	See table 1 below			Ω	
Shunt capacitance (C0)			3.0	pF	
Load capacitance (CL)		18.0		pF	Standard (See options if other than STD)
Drive Level		10	100	μW	
Aging	-2		+2	ppm	@25°C±3°C First year
Insulation Resistance	500			MΩ	@ 100Vdc ± 15V

TABLE 1- Standard ESR

Frequency (MHz)	ESR(Ω) max	Frequency (MHz)	ESR(Ω) max
8.000-9.999 (Fund)	400	30.000 - 39.999 (Fund)	40
10.000 -11.999 (Fund)	200	40.000 - 54.000 (Fund)	35
12.000 -15.999 (Fund)	120	64.000 - 80.000 (3rd OT)	120
16.000 -19.999 (Fund)	70	98.304 - 125.000 (3rd OT)	80
20.000 - 29.999 (Fund)	50		

OPTIONS AND PART IDENTIFICATION: (Left blank if standard)



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Pb | **RoHS**
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OUTLINE DRAWING:



Table 2

	Height (mm)
ABM8	0.80 max
ABM81	0.65+/-0.05
ABM82	0.60+/-0.10

Note: Due to material availability, the chamfer could be located on pin #1, 3, or 4. Be advised that the chamfer location has no impact on the electrical performance of the device.

Dimensions: mm

TAPE & REEL:

- Option "-T" : Tape and reel (1,000pcs/reel) : ABM8, ABM82
Tape and reel (3,000pcs/reel) : ABM81
- Option "-T2" : Tape and reel (250pcspcs/reel) : ABM8
- Option "-T3" : Tape and reel (3,000pcs/reel) : ABM8, ABM82 only



Dimensions: mm

REFLOW PROFILE:



Zone	Description	Temperature	Time
1	Preheat	$T_{SMIN} \sim T_{SMAX}$ $150^\circ\text{C} \sim 180^\circ\text{C}$	60 ~ 120 sec.
2	Reflow	T_L 230°C	30 ~ 40 sec.
3	Peak heat	T_p $260^\circ\text{C} \pm 5^\circ\text{C}$	10 sec. MAX

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-dependent 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.

Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

- ⊖ [View ABM8-20.000MHZ-D2Y-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