



13.0 x 5.0 x 5.1 mm

# MICROPROCESSOR CRYSTALS AT49 CASE GROUNDED (- G), SURFACE MOUNT ABSM5 Series

## FEATURES:

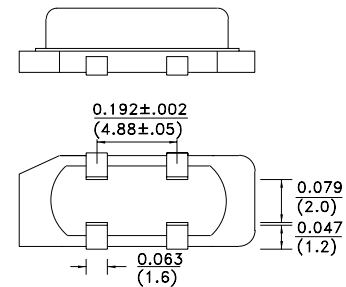
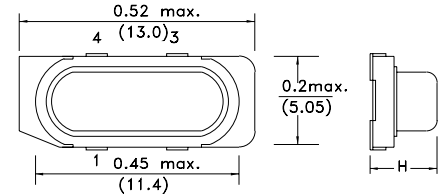
- Excellent all-purpose surface-mount crystal, 4.88 mm lead spacing.
- Case ground option on G series.
- Four pad land pattern compatible with common ceramic package.

## APPLICATIONS:

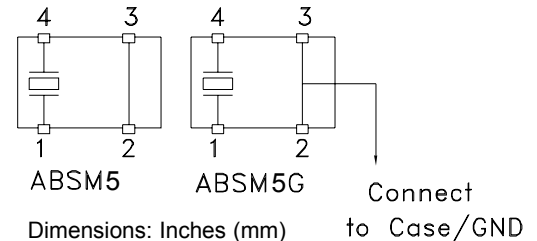
- Modems, Communications, High-density equipment.

## STANDARD SPECIFICATIONS

Frequency Range	<b>3.579MHz - 60MHz</b>
Operation Mode	3.579MHz - 28MHz (Fundamental) 28.01MHz - 60MHz (3rd overtone) (Fundamental Frequency up to 50MHz)
Operating Temperature	-10°C to +60°C (See Options)
Storage Temperature	- 40° to +85°C
Frequency Tolerance @ 25°C	±50ppm max. (See Options)
Frequency Stability over Temp.	±100ppm max. (See Options)
Equivalent Series Resistance (ESR) Fundamental	180 Ω max. for 3.579MHz ≤ F < 4.000MHz 150 Ω max. for 4.000MHz ≤ F < 5.000MHz 100 Ω max. for 5.000MHz ≤ F < 7.000MHz 50 Ω max. for 7.000MHz ≤ F < 15.00MHz 40 Ω max. for 15.00MHz ≤ F ≤ 50.00MHz
3rd Overtone	100 Ω max. for 28.0MHz < F ≤ 60.00MHz
Shunt Capacitance C <sub>0</sub>	7pF max.
Load Capacitance C <sub>L</sub>	18pF (See Options)
Drive Level	1mW max., 100μW correlation
Aging @ 25°C per Year	±5ppm max.
Insulation Resistance	500M Ω min. at 100Vdc ±15V



Electrode arrangement



Part Number	H (max.) inch.(mm)
ABSM5	0.2 (5.1)
ABSM52	0.18 (4.5)
ABSM53	0.15 (3.8)
ABSM5G	0.2 (5.1)
ABSM52G	0.18 (4.5)

Environmental, and mechanical specifications, see appendix C. Group 1.  
Marking, see appendix G. Tape and Reel, see appendix C.(1,000 pcs/reel)  
Reflow profile, see appendix E. Recommended handling, see appendix F.  
Application notes, see appendix A.

## ORDERING OPTIONS

ABSM5X X	Frequency	CL	ESR	Temperature	Tolerance	Stability	Mode	Packaging
Blank 2 or 3	Blank or G	XX.XXXX MHz Load cap.in pF or -S for Series	RXXX (value in Ω) -E for 0°C to +70°C -B for -20°C to +70°C -C for -30°C to +70°C -N for -30°C to +85°C -D for -40°C to +85°C	-H5 for ± 5ppm** -1 for ± 10ppm -7 for ± 15ppm -2 for ± 20ppm -3 for ± 25ppm -4 for ± 30ppm	-R5 for ± 5ppm** -U for ± 10ppm -G for ± 15ppm -X for ± 20ppm -W for ± 25ppm -Y for ± 30ppm -H for ± 35ppm -Z for ± 50ppm	-F (Fundamental AT > 28MHz) -FB (Fundamental BT > 28MHz)*	-T (Tape & Reel)	

\*\* Please contact us for availability.

NOTE: Left blank if standard • All specifications and markings subject to change without notice



29 Journey • Aliso Viejo, CA 92656 • USA  
(949) 448-7070 • FAX: (949) 448-8484

E-MAIL: [abinfo@abracon.com](mailto:abinfo@abracon.com) • INTERNET ADDRESS: [www.abracon.com](http://www.abracon.com)

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ISO 9001 / QS 9000  
CERTIFIED