

Engineering/Process Change Notice

ECN/PCN No.: 5100

For Manufacturer							
Product Description:	Abracon Part Number / Part Series:		☐ Documentation only	Series			
Oscilent-Crystal	253		☐ ECN	☐ Part Number			
			⊠ EOL				
Affected Revision:	New Revision:		Application: ☐ Safety				
REV A	EC	DL	⊠ Non-Sa				
Prior to Change: ACTIVE							
After Change: EOL							
Cause/Reason for Change: As part of an effort to streamline our portions and the streamline our portions.	tfolio and better serve	customers, we are disc	continuing select products a	nd offering a Last			
	Char	nge Plan					
Effective Date:	Additional Remarks:						
11/27/2025							
Change Declaration:							
Product Discontinuation							
Issued Date:	Issued By:	_		Issued Department:			
8/29/2025		Stephanie Lopez		Engineering			
Approval:	Approval:		Approval:				
Thomas Culhane	Reuben Quintanilla		Ying Huang				
Engineering Director	Quality Director		Purchasing Director				
	For Abra	con EOL only					
Last Time Buy (if applicable): 2/27/2026	Alternate Part Number / Part Series: N/A						
Additional Approval:	Additional Approval:		Additional Approval:				
	Customer Appr	oval (If Applicable)					
Qualification Status:							
Note: It is considered approved if there is		☐ Not accepted customer 1 month afte	r ECN/PCN is released.				
Customer Part Number: Custo		Customer Project:	Customer Project:				
Company Name:	Company Representative:		Representative Signature:				
Customer Remarks:							



Form #7020 | Rev. G | Effective: 02/22/2021 |













Package	Description		
HC-49SM 4 Pad	SMD Quartz Crystal		

Features

- Cost Effective
- Low Profile
- Space saving design
- Tape and Reel



Electrical Characteristics

Parameter	Conditions	Characteristics	Units
Frequency Range	f0	3. 579545 ~ 30.999	MHz
Frequency Tolerance	Ref @ +25°C	±30 (Std.) X ±15 , ±50 (Option)	PPM
Temperature Stability	TL	±50 (Std.) / ±30 , ±100 (Option)	PPM
Operating Temperature	T _{OPR}	-20 ~ +70 (Std.) / -40 ~+85 (Option)	°C
Storage Temperature	TSTG	-40 - +85	°C
Resistance	ESR	(See Table 1)	Ohms
Mode of Operation		Fundamental	
Shunt Capacitance	CO	7.0 max.	pF
Load Capacitance	ČL.	18.0 (Std.) / 10 - 50 and Series (Option)	pF
Drive Level	DL	1.0 max.	mW
Aging (First Year)	@ +25°C	±5.0	PPM/Y
Insulation Resistance	IR	500 (DC100 ±10V) min.	Mohm

Table 1: Operation Mode and Motional Resistance

Frequency Range	Mode	Ohm Max	Frequency Range	Mode	Ohm Max
3.579545 ~ 4.999	Fundamental/AT	200	15.0 ~ 15.999	Fundamental/AT	60
5.0 ~ 5.999	Fundamental/AT	150	16.0 ~ 23.999	Fundamental/AT	50
6.0 ~ 7.999	Fundamental/AT	120	24.0 ~ 30.999	Fundamental/AT	40
8.0 ~ 8.999	Fundamental/AT	90			
9.0 ~ 9.999	Fundamental/AT	80			
10.0 ~ 14.999	Fundamental/AT	70			



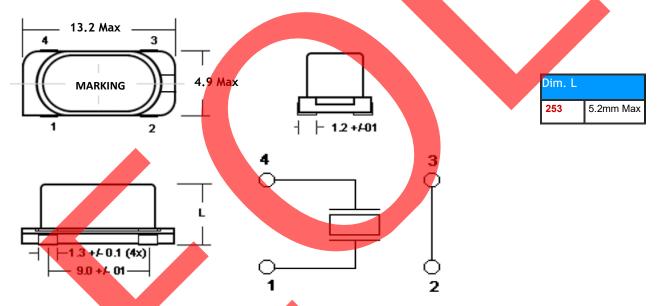
Table 2: Part Numbering Guide

Series Number	Frequency	Load Capacitance	Tolerance @ +25oC	Tolerance Over Temp (oC)	Operating Temp (oC)	Packaging
253	- 12.0M	- 18	- 50	N	W	- TR
HC-49SM	Enter desired standard freq. and enter here e.g. 2.048M for 2.048 MHz OR enter any desire frequency.	Enter desired capacitance here. e.g20 for 20pF	Blank * = ±30 PPM 15 = ±15 PPM 50 = ±50 PPM	Blank* = ±50 PPM G = ±30 PPM N= ±100 PPM	S = -20~+70 W = -40~+85	Blank* = Bulk TR = Tape/Reel

NOTE: Deviations on all parameters available. Please consult Oscilent for details.

*STANDARDS: "Blank" part number selections indicate standard variables for that particular characteristic.

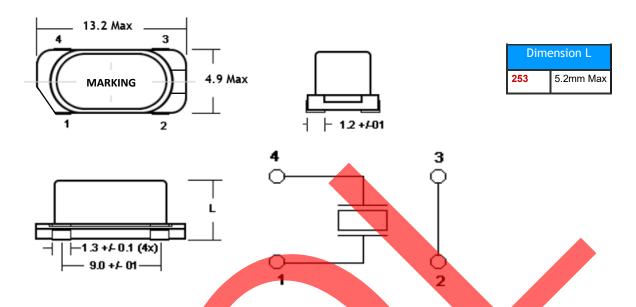
Package Dimensions



Note: Bottom side; package requires use of Epoxy Sealant.

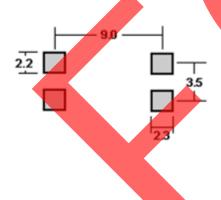


Alternative Package Dimensions



Note: Bottom side; package does not require use of Epoxy Sealant.

Solder Pad Layout





Tapes & Reel

