

AT-CUT CRYSTAL UNIT (SMD · Metal-can Type)

RoHS compliant HCM49 1,000pcs/reel



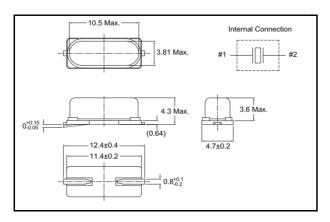
■ FEATURES

● Frequency range : 3.5 ~ 50.0MHz

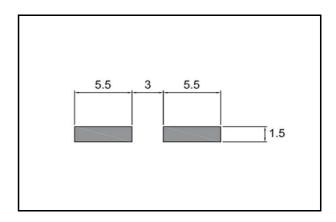
External dimensions (mm)L: 11.4 x W: 4.7 x H: 4.3

Applications Consumer products

■ DIMENSION [mm]



■ SOLDER PAD LAYOUT [mm]



■ STANDARD SPECIFICATIONS

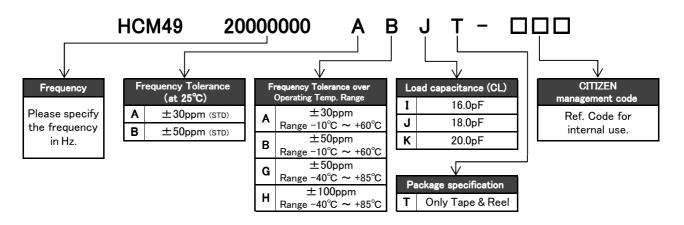
Item	Model	НСМ49	Conditions			
Nominal Frequency	fo	3.5MHz ~ 30.0MHz (Fundamental) 30.0MHz ~ 50.0MHz (3rd Overtone)	Please contact us for frequencies available			
Frequency Tolerance	∆f/fo	±30ppm	at 25 [°] C			
Frequency Tolerance over Operating Temperature Range	Δf/fo	below 6.0MHz:±50ppm above 6.0MHz:±30ppm	-10°C∼+60°C			
Operating Temperature Range	Topr	-40°C ~ +85°C				
Storage Temperature Range	Tstr	−55°C ~ +125°C				
Motional (series) resistance	R ₁	Refer to the following table	at 25 [°] C			
Load capacitance	CL	Fundamental:10.0pF ~ ∞ 3rd Overtone:5.0pF ~ ∞	Please specify your requirement			
Shunt capacitance	C ₀	7.0pF Max.				
Level of drive	DL	100 μ W				
Insulation Resistance	I R	500M Ω Min.	DC100V±15V			
Aging (first year)	∆f/fo	±5ppm Max.	25°C±3°C			

■ MOTIONAL (SERIES) RESISTANCE (R1)

Freq. Range (MHz)	3.5≦fo<4.0	4.0≦fo<6.0	6.0≦fo<10.0	10.0≦fo<14.0	14.0≦fo<30.0	30.0≦fo<36.0	36.0≦fo≦50.0
Mode	Fundamental	Fundamental	Fundamental	Fundamental	Fundamental	3rd Overtone	3rd Overtone
R1	200 Ω Max.	150 Ω Max.	100 Ω Max.	80 Ω Max.	50 Ω Max.	140 Ω Max.	100 Ω Max.

CITIZEN

■ PART NUMBERING SYSTEM



*Please contact us for specifications available.

■ Part Marking [standard]



f: The first 4 digits of Frequency including the decimal point

C: Manufacture's ID Code

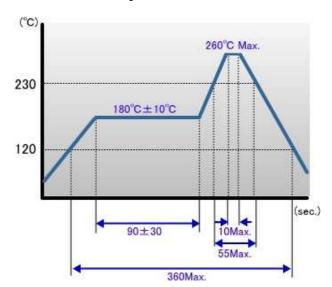
y: The last digit of production year

m : Production month (See Table.1)

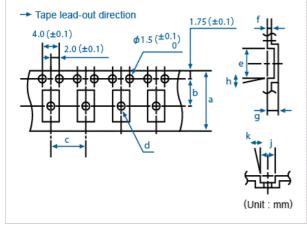
Table.1

Month	Jan	Feb		Sep	Oct	Nov	Dec
Code	1	2	•••	9	Χ	Υ	Z

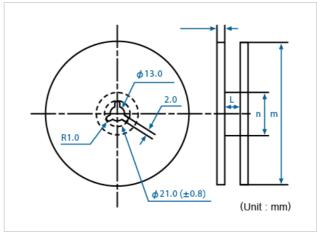
■ Reflow profile



■ Packing



Conforming to JIS C 0806 TB1208NEIAJ and RC-1009B TE1208N



Conforming to JIS C 0806 R12R and EIAJ RC-1009B R15

Q'ty/reel	а	b	С	$d(\phi)$	е	f	g	h	j	k		$m(\phi)$	n(ϕ)
1,000	24.0	11.5	12.0	2.0	14.1	0.4	4.2	5°	6.5	5°	25.5	330	80

Product specifications are subject to change without notice.