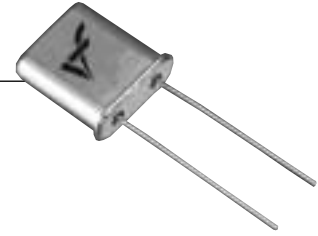


# VM6



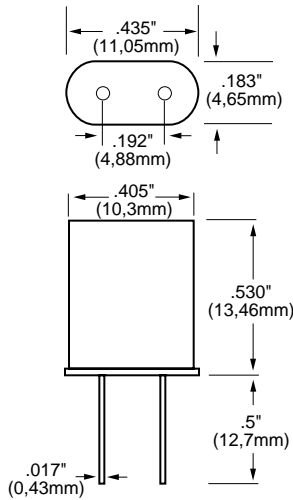
## Resistance Weld HC49

### FEATURES

- Industry Standard Package
- Excellent Aging
- Wide Frequency Range Available
- AT Cut Crystal
- Low Cost for Standard Frequencies

### OPTIONS

- Surface Mount  
(See VM6SSM1, VM6SSM2)
- Third Lead
- Vinyl Sleeve
- Mylar Spacer
- Tape & Reel



Parameter	Unit	Condition	Min	Typ	Max	Note
Frequency Range	MHz		1.8		200	
Frequency Tolerance	ppm	@25°C			±50	
Frequency Stability	ppm	-20 to +70°C			±100	Ref: @25°C
Operating Temperature Range	°C		-20		+70	
Storage Temperature Range	°C		-30		+85	
Shunt Capacitance (C <sub>0</sub> )	pF				7.0	
Load Capacitance (C <sub>L</sub> )	pF	Customer Specified	10	20	series	
Drive Level	mW	1.8 - 3.00 MHz 3.00 - 200 MHz		0.1 0.1	2 1	
Aging Per Year	ppm	@25°C			±5	1st Year
Frequency Range	Mode	Max ESR (Ω)				
1.800 - 2.000	Fundamental	750				
2.000 - 2.400	Fundamental	500				
2.400 - 3.000	Fundamental	300				
3.000 - 3.200	Fundamental	200				
3.200 - 3.700	Fundamental	120				
3.700 - 4.200	Fundamental	100				
4.200 - 4.900	Fundamental	70				
4.900 - 5.000	Fundamental	55				
5.000 - 6.000	Fundamental	50				
6.000 - 8.000	Fundamental	40				
8.000 - 10.000	Fundamental	35				
10.000 - 12.500	Fundamental	30				
12.500 - 16.000	Fundamental	25				
16.000 - 25.000	Fundamental	20				
16.000 - 23.000	3rd Overtone	60				
23.000 - 65.000	3rd Overtone	40				
60.000 - 125.000	5th Overtone	80				
125.000 - 200.000	7th Overtone	120				

Notes:

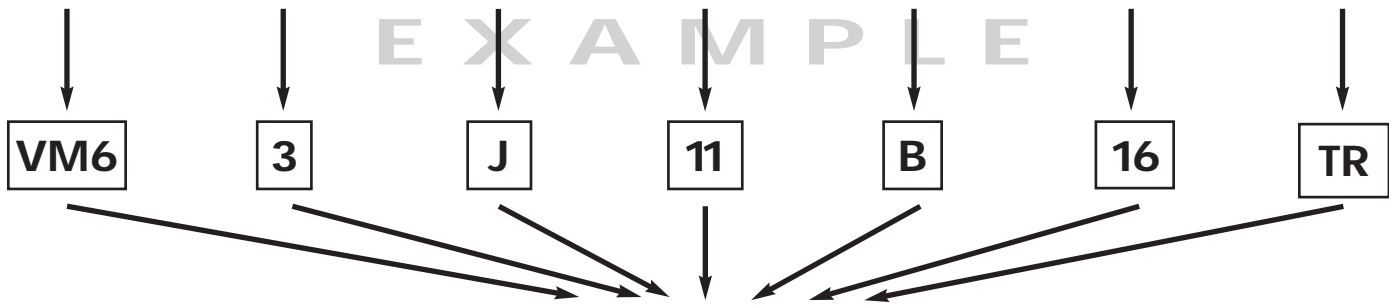
1. Please reference "Building a Part Number" on page 36 if the desired specification is not found in the "Standard Crystal Part Number Chart" on pages 13-14.
2. This product is also available to meet other pullability specifications.

All specifications are subject to change without notice.

**BUILDING A PART NUMBER**

Package	Mode		Calibration Tolerance		Temperature Stability		Operating Temperature Range		Series/Parallel		Options	
Code/Meaning	Code	Meaning	Code	Meaning	Code	Meaning	Code	Meaning	Code	Meaning	Code	Meaning
VM6	1	Fundamental	A	±5ppm	1	±2ppm	A	0 to 70°C	0	Series	5	3rd Lead
VM6S	3	3rd OT	B	±10ppm	2	±5ppm	B	-20 to 70°C	ENTER VALUE OF		MS	Mylar Spacer
VM6SS	5	5th OT	C	±15ppm	3	±10ppm	C	-40 to 85°C	LOAD CAPACITOR		TR	Tape + Reel
VM6SSM2	7	7th OT	D	±20ppm	4	±15ppm	D	-55 to 125°C	FOR PARALLEL		VS	Vinyl Sleeve
UM-1	9	9th OT	E	±25ppm	5	±20ppm	XX	SPECIAL	CIRCUITS		CL	Cut Leads
UM-4			F	±30ppm	6	±25ppm	E	-10 to 60°C				(spec. length)
UM-5			G	±35ppm	7	±30ppm					0	None
NC26			H	±40ppm	8	±35ppm						
NC38			I	±45ppm	9	±40ppm						
VFSMC-1			J	±50ppm	10	±45ppm						
VFSMC-2			K	±100ppm	11	±50ppm						
VFSMC-3			L	±150ppm	12	±100ppm						
VFSMC-4			M	±200ppm	13	±150ppm						
VFSMC-5			XX	SPECIAL	14	±200ppm						
VFSMC-6					00	SPECIAL						
VM6SSM2												
VM6SSM1												
VFAG												
VFBE												
VFBG												
VFCG												
VFCE												
VFDG												
VFEG												
VFHH												
VFFE												
VFFG												
VFFH												
VF												
VFSMA												
VF49A16FN1												
VF49A18FN1												
VF49A19FN1												
VF45												

**EXAMPLE**



**VM63J11B16TR-FREQUENCY**

- VM6** = VM6
- 3** = 3rd OT
- J** = ±50ppm calibration at room temperature.
- 11** = ±50ppm temperature stability
- B** = -20 to 70°C operating temperature range over which ±50ppm stability applies
- 16** = 16pF load capacitance
- TR** = Tape + Reel

**Note:** Some part number options not available with all package types.