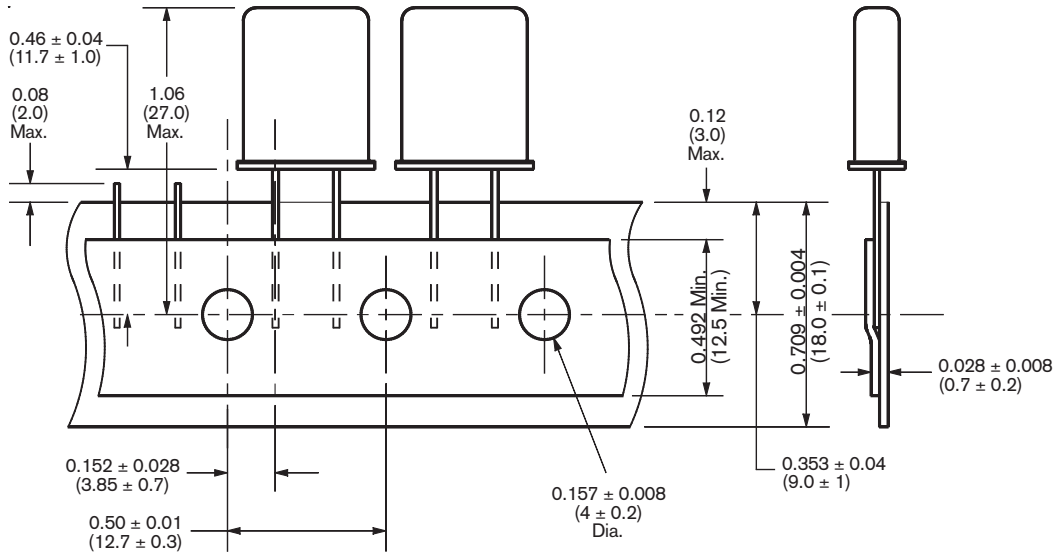


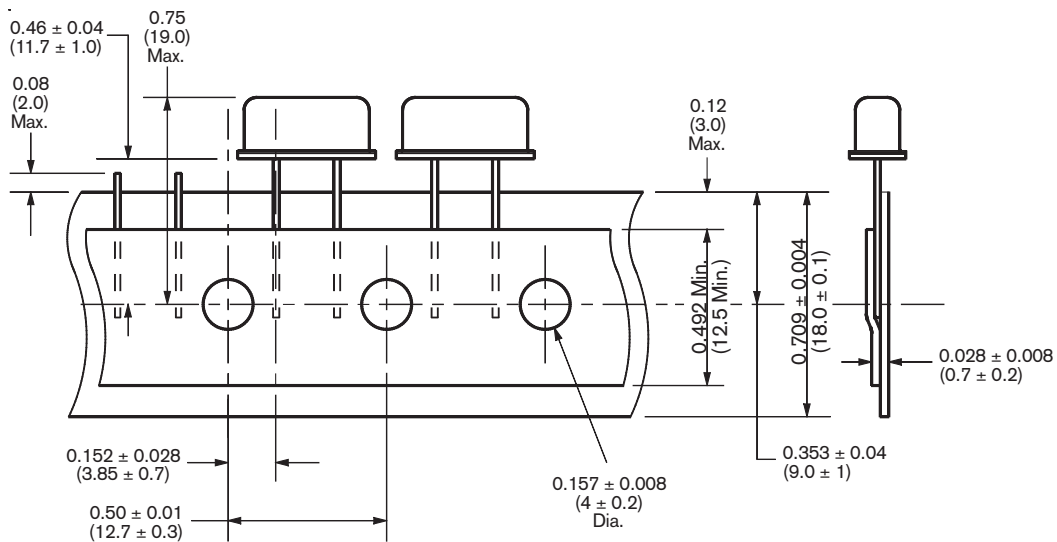
# TAPE SPECIFICATIONS

## Thru-Hole Devices

### TAPE DIMENSIONS FOR HC-49/U (FMXTA Series, FMXMA Series)



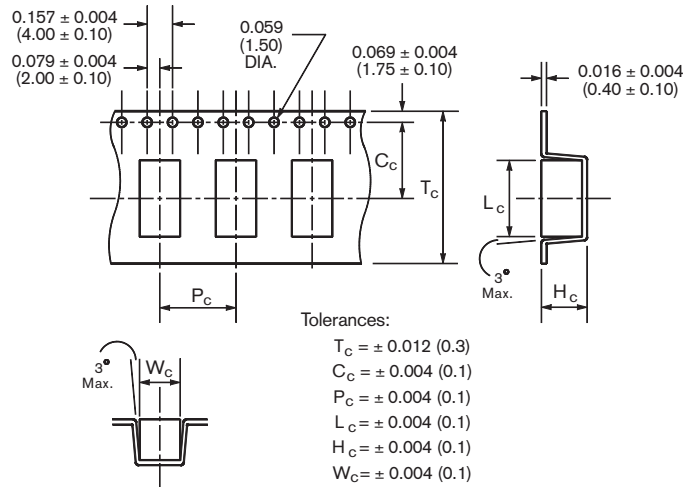
### TAPE DIMENSIONS FOR HC-49/US (FMXMB Series)



# TAPE & REEL SPECIFICATIONS

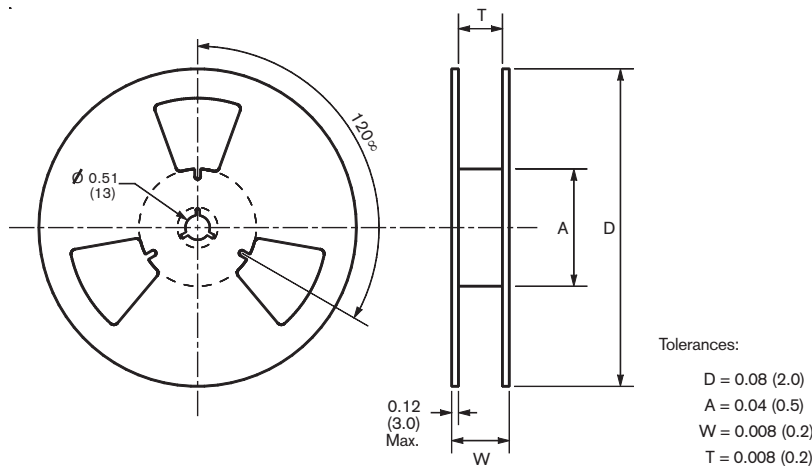
## Surface Mount Devices

### TAPE DIMENSIONS FOR SMD COMPONENTS



Product Family	Dimensions: inches (mm)					
	Tc	Lc	Wc	Hc	Pc	Cc
FMXMBS, FMXMPS	0.945 (24.0)	0.512 (13.0)	0.213 (5.4)	0.165 (4.2)	0.472 (12.0)	0.453 (11.5)
FMXMCS	0.630 (16.0)	0.315 (8.0)	0.213 (5.4)	0.067 (1.7)	0.315 (8.0)	0.295 (7.5)
FMXMJS, FMXWJS	0.945 (24.0)	0.472 (12.0)	0.232 (5.9)	0.189 (4.8)	0.472 (12.0)	0.453 (11.5)
FMOC5S, FMOC3S	0.630 (16.0)	0.315 (8.0)	0.213 (5.4)	0.094 (2.4)	0.315 (8.0)	0.295 (7.5)
FMOCJS	0.945 (24.0)	0.472 (12.0)	0.232 (5.9)	0.189 (4.2)	0.472 (12.0)	0.453 (11.5)
FMVCJS	0.945 (24.0)	0.472 (12.0)	0.232 (5.4)	0.189 (4.2)	0.472 (12.0)	0.453 (11.5)

### TAPE DIMENSIONS FOR SMD COMPONENTS



Product Family	Dimensions: inches (mm)				Quantity per Reel
	D	A	W	T	
FMXMBS, FMXMPS	13.0 (330)	3.94 (100)	0.882 (22.4)	0.646 (16.4)	2000
FMXMCS	13.0 (330)	3.94 (100)	1.157 (29.4)	0.961 (24.4)	1000
FMXMJS, FMXWJS	13.0 (330)	3.94 (100)	1.161 (29.5)	1.004 (25.5)	1000
FMOC5S, FMOC3S	13.0 (330)	3.94 (100)	1.157 (29.4)	0.961 (24.4)	1000
FMOCJS	13.0 (330)	3.94 (100)	1.161 (29.5)	1.004 (25.5)	1000
FMVCJS	13.0 (330)	3.94 (100)	1.161 (29.5)	1.004 (25.5)	1000

# MARKING SPECIFICATIONS

## Crystals & Monolithic Filters

FORMAT A	FORMAT B
<p><b>Package Type:</b> HC-49/U  <b>Layout:</b> 3 Lines; 8 Characters Max; 2 sides  <b>Product Series:</b> FMXTA, FMXMA, FMXFA</p> <p><b>Line 1:</b> <u>XX.XXX M</u>            M = MHz            Frequency (5 digits max.)</p> <p><b>Line 2:</b> <u>XXXXXX</u>            Descriptor or Model*</p> <p><b>Line 3:</b> <u>FM YYWW</u>            Datecode (Year/Week)            FM Logo</p> <p>*FMXTA/FMXMA: Consists of "Part Numbering System" codes (Model/Load Cap./Cal. Tol./Temp. Tol./Temp. Range)            *FMXFA: Consists of "Model" as listed in "Part Numbering System"</p> <p style="text-align: center;"><b><i>CUSTOM MARKING AVAILABLE</i></b></p>	<p><b>Package Type:</b> UM-1  <b>Layout:</b> 3 Lines; 4 Characters Max; 2 sides  <b>Product Series:</b> FMXTU, FMXMU, FMXFU, FMXIMU</p> <p><b>Line 1:</b> <u>XX.XXX M</u>            M = MHz            Frequency (5 digits max.)</p> <p><b>Line 2:</b> <u>XXXXXX</u>            Descriptor or Model*</p> <p><b>Line 3:</b> <u>FM YYWW</u>            Datecode (Year/Week)            FM Logo</p> <p>*FMXTU/FMXMU: Consists of "Part Numbering System" codes (Model/Load Cap./Cal. Tol./Temp. Tol./Temp. Range)            *FMXFU: Consists of "Model" as listed in "Part Numbering System"</p> <p style="text-align: center;"><b><i>CUSTOM MARKING AVAILABLE</i></b></p>
FORMAT C	FORMAT D
<p><b>Package Type:</b> UM-5  <b>Layout:</b> 2 Lines; 4 Characters Max; 2 sides  <b>Product Series:</b> FMXTU, FMXMU, FMXFU</p> <p><b>Line 1:</b> <u>XX.XXX M</u>            M = MHz            Frequency (5 digits max.)</p> <p><b>Line 2:</b> <u>FM YYWW</u>            Datecode (Year/Week)            FM Logo</p> <p style="text-align: center;"><b><i>CUSTOM MARKING AVAILABLE</i></b></p>	<p><b>Package Type:</b> HC-49/US, HC-49/US SMD  <b>Layout:</b> 1 Line; 6 Characters Max.  <b>Product Series:</b> FMXMB, FMXMB, FMXMPS</p> <p><b>Line 1:</b> <u>F XX.XXX</u>            Frequency (5 digits max.)            FM Logo</p> <p style="text-align: center;"><b><i>CUSTOM MARKING AVAILABLE</i></b></p>
FORMAT E	FORMAT F
<p><b>Package Type:</b> Ceramic 5 x 7 mm SMD  <b>Layout:</b> 2 Lines; 5 Characters Max.  <b>Product Series:</b> FMXMCS</p> <p><b>Line 1:</b> <u>XX.XXX M</u>            M = MHz            Frequency (5 digits max.)</p> <p><b>Line 2:</b> <u>FM YYWW</u>            Datecode (Year/Week)            FM Logo</p> <p style="text-align: center;"><b><i>CUSTOM MARKING AVAILABLE</i></b></p>	<p><b>Package Type:</b> J-Lead Plastic SMD  <b>Layout:</b> 1 Line; 6 Characters Max.  <b>Product Series:</b> FMXMJS, FMXWJS</p> <p><b>Line 1:</b> <u>F XX.XXX</u>            Frequency (5 digits max.)            FM Logo</p> <p style="text-align: center;"><b><i>CUSTOM MARKING AVAILABLE</i></b></p>

# MARKING SPECIFICATIONS

## Oscillators

### FORMAT G

**Package Type:** Full Size - 14 pin DIP  
**Layout:** 3 Lines; 13 Characters Max.  
**Product Series:** FMOC11, FMOC31, FMOC71, FMVC46, FMTCW, FMVC33, FMVC47, FMOECL, FMOPCL, FMVPCL, FMVCTC

**Line 1:** XXX.XXX M  
 M = MHz  
 Frequency

**Line 2:** XXXXXX  
 Product Family

**Line 3:** • FM YYWW  
 Datecode (Year/Week)  
 FM Logo  
 Pin 1 Locator

*CUSTOM MARKING AVAILABLE*

### FORMAT H

**Package Type:** Half Size - 8 pin DIP  
**Layout:** 3 Lines; 6 Characters Max.  
**Product Series:** FMOC18, FMOC38, FMOC78, FMOEC8, FMOPC8, FMVC48

**Line 1:** XX.XXX M  
 M = MHz  
 Frequency

**Line 2:** XXXXXX  
 Product Family

**Line 3:** • FM YYWW  
 Datecode (Year/Week)  
 FM Logo  
 Pin 1 Locator

*CUSTOM MARKING AVAILABLE*

### FORMAT J

**Package Type:** 14 pin DIP Compatible  
**Layout:** 3 Lines; 8 Characters Max.  
**Product Series:** FMTC51

**Line 1:** XX.XXX M  
 M = MHz  
 Frequency

**Line 2:** XXXXXX  
 Product Family

**Line 3:** • FM YYWW  
 Datecode (Year/Week)  
 FM Logo  
 Pin 1 Locator

*CUSTOM MARKING AVAILABLE*

### FORMAT K

**Package Type:** Lead Frame SMD  
**Layout:** 3 Lines; 8 Characters Max.  
**Product Series:** FMTCLS, FMVTL5

**Line 1:** XX.XXX M  
 M = MHz  
 Frequency

**Line 2:** XXXXXX  
 Product Family

**Line 3:** • FM YYWW  
 Datecode (Year/Week)  
 FM Logo  
 Pin 1 Locator

*CUSTOM MARKING AVAILABLE*

### FORMAT M

**Package Type:** Ceramic 5 x 7 mm SMD  
**Layout:** 3 Lines; 6 Characters Max.  
**Product Series:** FMOC5S, FMOC3S

**Line 1:** XX.XXX M  
 M = MHz  
 Frequency

**Line 2:** XXXXXX  
 Product Family

**Line 3:** • FM YYWW  
 Datecode (Year/Week)  
 FM Logo  
 Pin 1 Locator

*CUSTOM MARKING AVAILABLE*

### FORMAT P

**Package Type:** J-Lead Plastic SMD  
**Layout:** 3 Lines; 6 Characters Max.  
**Product Series:** FMOCJS, FMVCJS

**Line 1:** XX.XXX M  
 M = MHz  
 Frequency

**Line 2:** XXXXXX  
 Product Family

**Line 3:** • FM YYWW  
 Datecode (Year/Week)  
 FM Logo  
 Pin 1 Locator

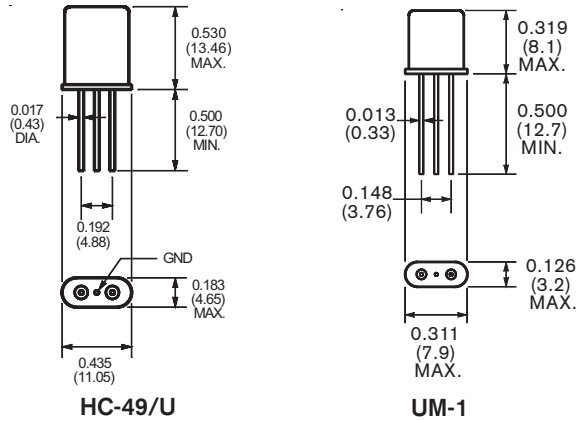
*CUSTOM MARKING AVAILABLE*

# VALUE ADDED OPTION SPECIFICATIONS

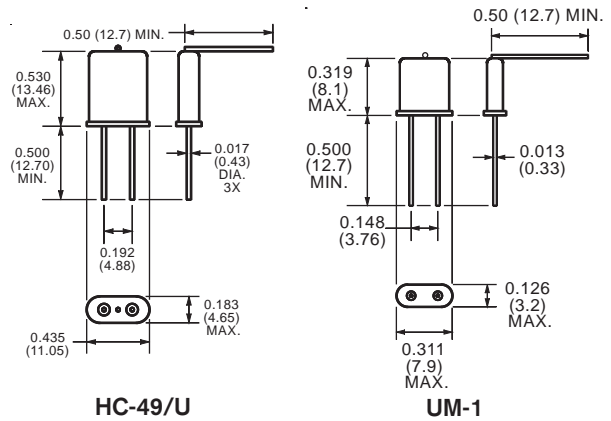
## Package, Lead and Other Options

See the [Frequency Management website](#) for the latest updates.

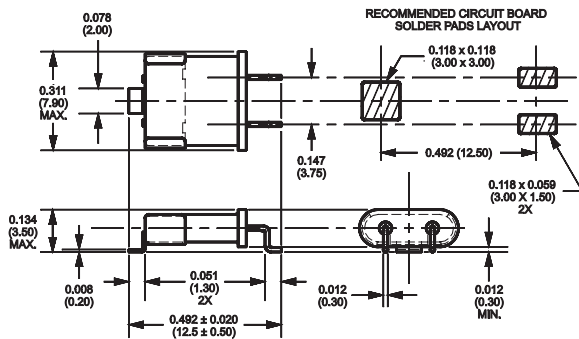
### OPTION GB, Ground Lead Base



### OPTION GT, Ground Lead Top

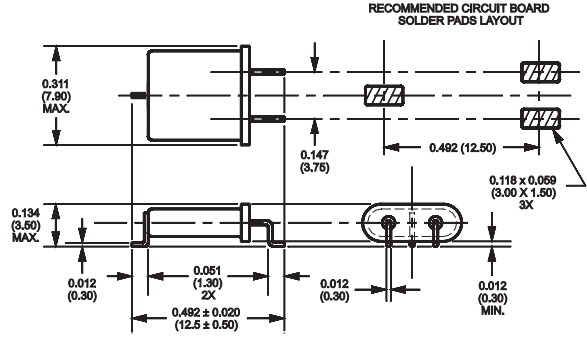


### OPTION LF, Lead Forming for SMD (Clip)



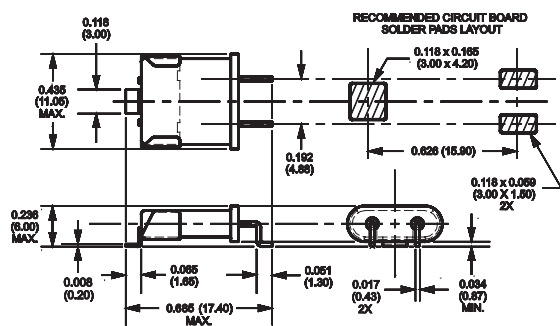
UM-1 Package with "Slip Clip on Top"

### OPTION LF, Lead Forming for SMD (Wire)



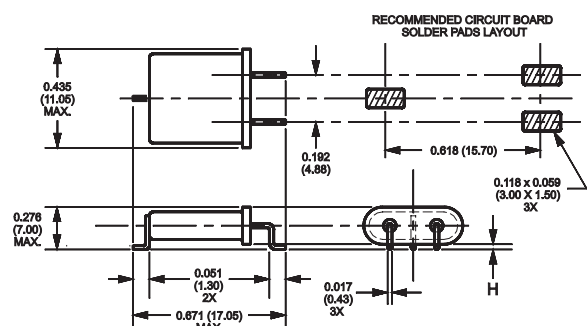
UM-1 Package with "Welded Top Lead"

### OPTION LF, Lead Forming for SMD (Clip)



HC-49/U "Lead Form with Clip"

### OPTION LF, Lead Forming for SMD (Wire)



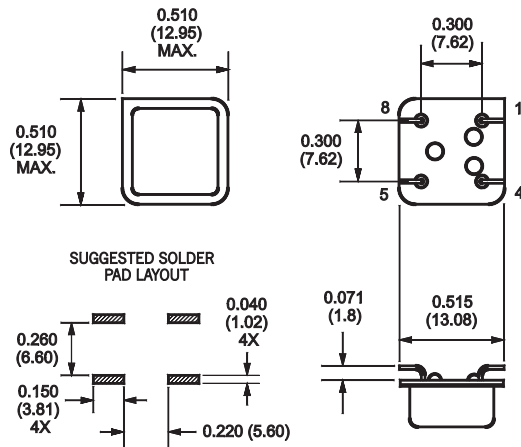
HC-49/U "Lead Forming with Wire"

# VALUE ADDED OPTION SPECIFICATIONS

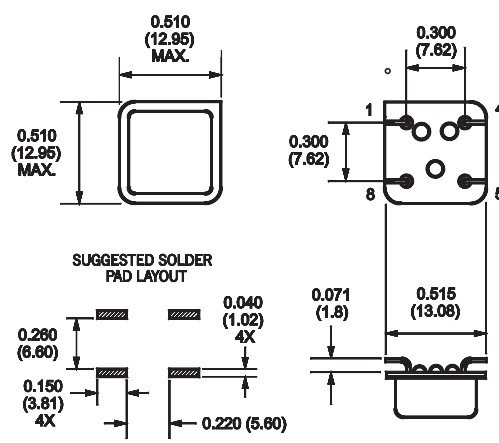
## Package, Lead and Other Options

See the [Frequency Management](#) website for the latest updates.

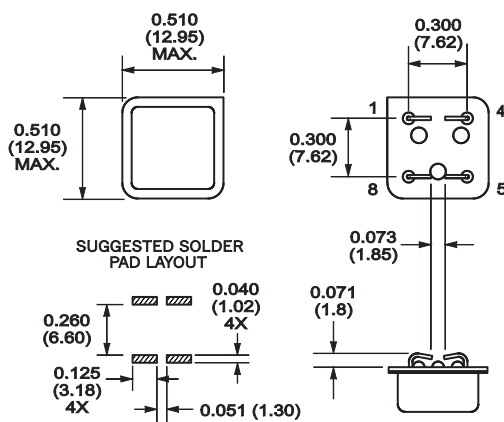
**OPTION GW, Half-Size GW1**



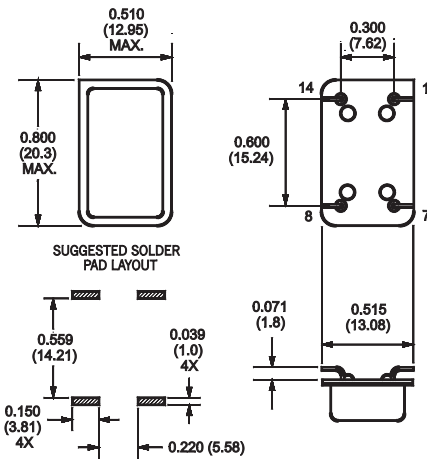
**OPTION GW, Half-Size GW2**



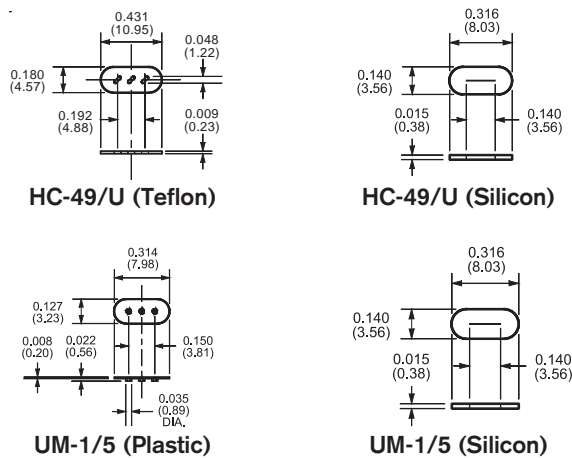
**OPTION HJ, Half-Size J-Lead 1**



**OPTION GW, Full-Size GW3**



**OPTION BI, Base Insulators**



**OPTION GW, Full-Size GW4**

