



SPECIFICATION FOR HC-49U/S-SMD CRYSTAL MtronPTI P/N 522-515-R Effective Date: March 23, 2011

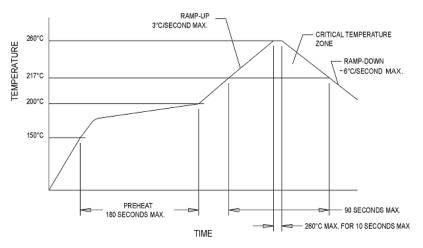
Electrical Specifications:

Parameter	Symbol	Min.	Тур.	Max.	Units	Conditions
Mode of Oscillation		Fund	damental A	T-Cut		
Available Frequency Range	Fo	3.579545		40.000000	MHz	
Frequency Tolerance	F/F	-25		+25	ppm	@ +25°C
Frequency Stability	$\Delta F/F$	-25		+25	ppm	
Operating Temperature	T _A	-10		+70	°C	
Aging		-5		+5	ppm	Per year
Load Capacitance	CL		18		pF	
Shunt Capacitance	Co			7	pF	
ESR				200	Ω	3.579 to 3.999 MHz
				150	Ω	4.000 to 4.999 MHz
				120	Ω	5.000 to 5.999 MHz
				100	Ω	6.000 to 9.999 MHz
				80	Ω	10.000 to 13.999 MHz
				50	Ω	14.000 to 40.000 MHz
Drive Level	D_L	50	100	500	μW	

Environmental & Mechanical Requirements:

Mechanical Shock	Per MIL-STD-202, Method 213, Condition C.
Vibration	Per MIL-STD-202, Methods 201 & 204
Thermal Cycle	Per MIL-STD-883, Method 1010, Condition B
Storage Temperature	-55°C to +125°C
Hermeticity	Per MIL-STD-202, Method 112 (1 x 10 ⁻⁸ atm cc/s of Helium)
Solderability	Per EIAJ-STD-002
Max. Soldering Conditions	See Figure 1
Package Type	2-pad HC-49U/S-SMD resistance weld. RoHS compliant.

Figure 1



1 of 2 MtronPTI reserves the right to make changes to the product described herein without notice. No liability is assumed as a result of its use or application.



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Legend



0.154 ±0.022 (3.90 ±0.55)

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Dimensions, Marking, and Pin Out Information:

Pa	rt Marking]	М	MtronPTI
Line 1	MFFFFVXY		F	Frequency
Line 2	522-515-R]	V	Vendor code
			Х	Month
			Y	Year
Line 1	0.484 ±0.024 (12.30 ±0.60) 0.190 (4.8		GESTED	SOLDER PAD LAYOUT
Line 2	¶	C	│ │ │ ━━	2.05)
(10.30) · MAX		.5)	.150 5.81) 	0.437 +0.020/-0.03 ² (11.10 +0.50/-0.80)
	MAX	N	1AX	0.031 ±0.012
	,,	\Box		(0.80 ± 0.30)
	L			-1 (0.00 ± 0.30)

DATA SHEET REVISION TABLE:

All dimensions in inches (mm)

DATA ONEET REVISION TABLE.				
Date	Rev.	Author	Details of Revision	
3/23/11	0	WNJ	Original release.	

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