FEATURES

Resistance Weld (HC-49S) AT-Cut Fundamental and Overtone Modes Swept Quartz Options Available Rugged Design to support harsh environments

APPLICATIONS

Avionics and Aerospace Communication and Navigation Military Radios Instrumentation and Industrial Test and Measurement Equipment

ORDERING INFORMATION

	ATS-49	-R	00.0000 MHz			
Product						
ATS-49: Fundamental (AT-ci	ATS-49: Fundamental (AT-cut)					
 397-030: Fundamental (AT-Cut), 20pF load Capacitance, ±30 ppm tolerance, ±50 ppm stability, -10°C to +70°C operating temperature 397-040: Fundamental (AT-Cut), series resonant, -10°C to +70°C operating temperature 						
397-310 : Fundamental (AT-Cut), 18pF load, -40°C to +85°C operating temperature						
482-010: Third Overtone (AT-Cut), base insulator						
482-040: Third Overtone (AT-Cut), series resonant, base insulator						
482-740: Third Overtone (AT-Cut), series resonant, -40°C to +85°C operating temperature						
483-240: Fundamental (AT-Cut), series resonant, ±30 ppm tolerance, ±50 ppm stability, -40°C to +85°C operating temperature						
493-040: Third Overtone (AT-Cut), series resonant						
RoHS Compliance -R: RoHS Compliant -V: non-RoHS	-					

Example of parallel resonant part Number: ATS-49-R 16 .0000 MHz Example of series resonant part Number: SRATS-49-R 16 .0000 MHz



Notes				
Note 1	Series resonant designated "SR" prefix (i.e., SRATS-49-R)			
Note 2	24.000 to 40.000 MHz have a tolerance of ±50 ppm and 100 ppm stability			

ELECTRICAL SPECIFICATIONS

Parameter	Symbol	Min.	Тур.	Max.	Units	Conditions
Frequency Range	F ₀	3.579545	<u> </u>	72	MHz	
Frequency Tolerance	F/F	-30		+30	ppm	@ +25°C, see ordering information.
Frequency Stability	∆F/F	-50		+50	ppm	Over the operating temperature range
		-3		+3	ppm	1 st year
Aging		-5		+5	ppm	Thereafter per year (up to 3 rd year)
Load Capacitance			18		pF	See Note 1
Shunt Capacitance				7	pF	
ESR			See ESR Table			
Drive Level	DL	25	100	500	μW	
Insulation Resistance	lr	500			МΩ	

Temperature						
Operating Temperature	TA	-10		+70	°C	
Storage Temperature	Ts	-55		+125	°C	

ESR Table

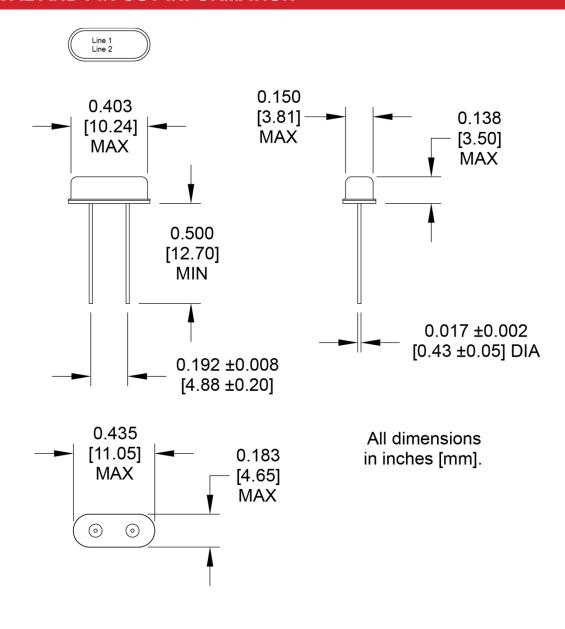
Frequency Range	ESR (MAX)			
Fundamental (AT-cut)				
3.579 to 3.999 MHz	200 Ω			
4.000 to 4.999 MHz	150 Ω			
5.000 to 5.999 MHz	120 Ω			
6.000 to 9.999 MHz	100 Ω			
10.000 to 13.999 MHz	80 Ω			
14.000 to 40.000 MHz	50 Ω			
Fundamental (BT-cut) – Note 2				
24.000 to 50.000 MHz	100 Ω			
Third Overtone (AT-cut)				
25.000 to 39.999 MHz	100 Ω			
40.000 to 72.000 MHz	80 Ω			



ENVIRONMENTAL CONDITIONS

Mechanical Shock	MIL-STD-202, Method 213 Condition C, 100 g
Vibration	MIL-STD-202, Methods 201 & 204, 10 g from 10-2000 Hz
Thermal Cycle	MIL-STD-883, Method 1010, Condition B, -55°C to +125°C
Hermeticity	MIL-STD-202, Method 112 (must meet 1 x 10-8)
Solderability	Per EIAJ-STD-002 Environmental
Max Soldering Conditions	Conditions +260°C for 10 secs. Max

MECHANICAL AND PIN OUT INFORMATION



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