

Ultra Miniature Crystal Oscillator DOC-49S Series

This precision super compact crystal oscillator combines CMOS circuitry and low power consumption with dimensions 5 x 5 x 10mm. The DOC-49S series is an exceptional choice where space allocation is at a minimum. Great in lap-top computer and modem applications.

SPECIFICATIONS

MODEL				
Output	CMOS	CMOS or TTL	CMOS or TTL	
Frequency Range	156.25kHz-20.0MHz	20.1MHz-50MHz	1.25MHz-20MHz	
Frequency Tolerance	±50ppm or ±100ppm			
Operating Temperature Range	-10~+70°C			
Storage Temperature Range	-20°C~+80°C			
OUTPUT	Output Level	CMOS	CMOS or TTL	
	"0" Level	0.5V max.		
	"1" Level	4.5V min.		
	Symmetry	40-60% ≥10MHz	40-60%	40-60% ≥10MHz
	2.4V DC Level	45-55% <10MHz		45-55% <10MHz
	Load	CL=15pF or 2LS-TTL	CL=15pF or 2LS-TTL	CL=50pF or 10LS-TTL
	Rise and Fall Time (Tr, Tf)	50 nsec max. <2MHz 20 nsec max. ≥2MHz	10 nsec max.	15 nsec max.
Supply Voltage		5±0.5V		
Supply Current	5mA max. (No Load)	15mA max.	10mA max. (No Load)	

ELECTRICAL PARAMETERS AND DIMENSIONS (MM)

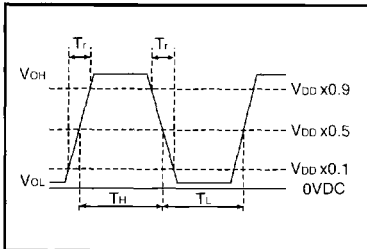


Fig 1) DOC-49 Series Output Wave Form

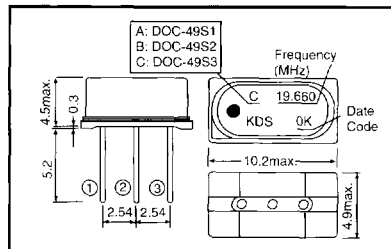


Fig 2) DOC-49S Series Dimensions

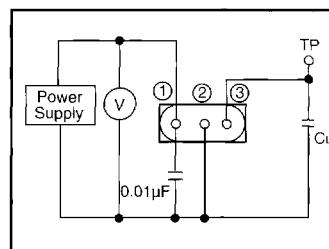


Fig 5) DOC-49S Measurement Circuit

Pin Connections	
#1	5V DC
#2	GND (CASE)
#3	OUTPUT

Fig 4) Pin Connections

C _L	
DOC-49S1	15 pF
DOC-49S2	15 pF
DOC-49S3	50 pF

Fig 5A) C_L (Includes probe capacitance)