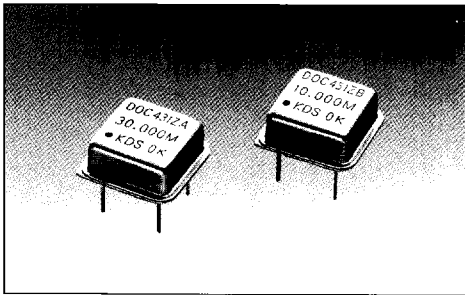




OSCILLATORS

Small Dip Type Clock Oscillator DOC-431 Z Series



KDS half size oscillators are half the size of standard 14 pin dip oscillators to solve critical board space problems. The 8 pin dip DOC 431Z series design is compatible with TTL or CMOS circuitry and offers proven dependability.

Enable/Disable and Tri-State options are available to ensure compatibility of this series with automatic test equipment. Employment of the tri-state function on model ZA and ZB controls the output. Applying logic "1" voltage level to pin 1 enables the oscillator output and logic "0" applied to pin 1 disables the output to a high impedance state.

SPECIFICATIONS

ITEM	DOC-431ZA, A	DOC-431ZB, B	
Output	TTL	CMOS	
Output Frequency	1.00-50.5MHz		
Frequency Tolerance	±100ppm		
Operating Temperature Range	0°C-70°C		
Storage Temperature Range	-55°C--125°C		
Operating Voltage	5V±0.5V		
Current Consumption	45mA max.		
OUTPUT	"0" Level	0.4V max.	
	"1" Level	2.4V MIN.	V _{DD} X 0.9 min.
	Rise and Fall Time (Tr, Tf)	5nsec. max. (TTL Level)	10nsec. max. (C-MOS Level)
	Symmetry	50%±5% (1.4 Level)	50%±5% (V _{DD} X 0.5V Level)
	Output Load (CL)	10TTL	50pF
	Input Voltage Level	V _{IL} =0.8V max./V _{IH} =2.2V max.	
	Input Current	I _{IL} =100µA max./I _{IH} =-150µA max.	
Output Enable Time (T _{PEL})	100nsec. max.		
Output Disable Time (T _{PZL})	100nsec. max.		

ELECTRICAL PARAMETERS AND DIMENSIONS (MM)

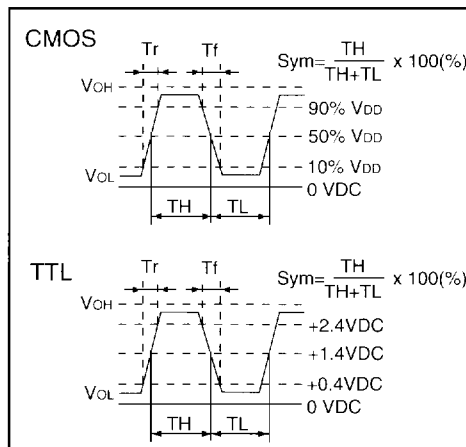


Fig 1) CMOS/TTL Output Wave Form

Function	Type	
Tri-State function	DOC-431ZA	DOC-431ZB
Non Tri-State function	DOC-431A	DOC-431B

Fig 2B) Function

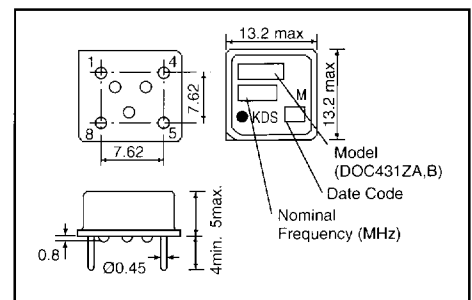


Fig 2) Dimensions

Pin connections		
1	Con Open "H" Osc.	No Con "L" High Imp.
4	GND (Case GND)	
5	Output	
8	+5V DC	

Fig 2A) Pin Connections

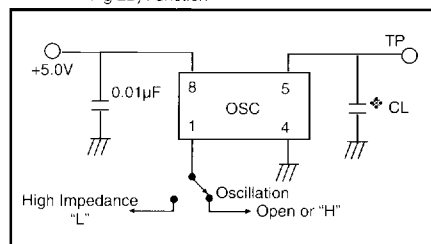


Fig 3) CMOS Measurement Circuit

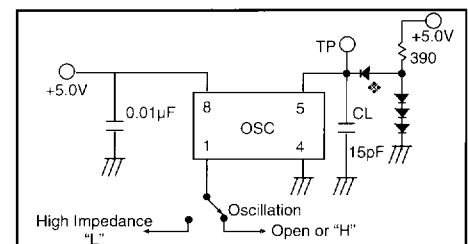


Fig 4) TTL Measurement Circuit