Crystal Clock Oscillator

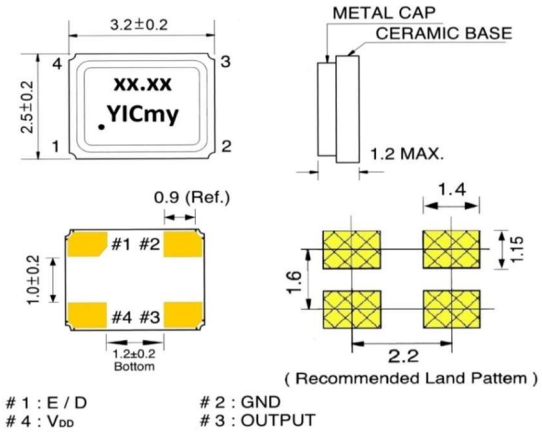
(OSC-S3 Series)

OSC-S3 Series: SMD Crystal Clock Oscillator 3.2x2.5 mm 4 Pads 1.000 - 156.000 MHz

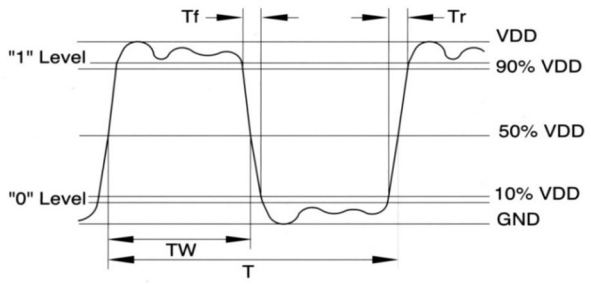
● SPECIFICATION

Model		OSC-S3 Series		
Frequency range		1.000 ~ 156.000 MHz		
Storage temperature range		- 55°C ~ + 125°C		
Operation temperature range		- 20°C ~ + 70°C , - 40°C ~ + 85°C , - 40°C ~ + 125°C , specify		
Frequency stability		±10 ppm ~ ±50 ppm		
Power supply voltage: (5.0V DC available on		3.3V DC ±10%	2.5V DC ±5%	1.8V DC ±5%
Current consumption		1.000~20.000 MHz : 6 mA (max)	1.000~20.000 MHz : 5 mA (max)	1.000~20.000 MHz : 2.5 mA (max)
		20.001~40.000 MHz : 7 mA (max)	20.001~40.000 MHz : 6 mA (max)	20.001~40.000 MHz : 3 mA (max)
		40.001~60.000 MHz : 9 mA (max)	40.001~60.000 MHz : 8 mA (max)	40.001~60.000 MHz : 5 mA (max)
		60.001~75.000 MHz : 17 mA (max)	60.001~75.000 MHz : 12 mA (max)	60.001~75.000 MHz : 9 mA (max)
		75.001~100.000 MHz : 25 mA (max)	75.001~100.000 MHz : 23 mA (max)	75.001~100.000 MHz : 12 mA (max)
		100.001~156.000 MHz : 28 mA (max)	100.001~156.000 MHz : 26 mA (max)	100.001~156.000 MHz : 15 mA (max)
Output level		C-MOS		
Load		15 pF		
Output voltage level		V_{OL} : 10% Vdd (max) / V_{OH} : 90% Vdd (min)		
Duty cycle		45% ~ 55% at 1/2 Vdd		
RISE / FALL TIME		7 nS (max)		
Phase Jitter		0.3 pS (typ)		
Startup time		5 mS (max)		
Enable Control Pad1	Enable Voltage High	70% Vdd (min)		
	Disable Voltage Low	30% Vdd (max)		
	Disable Current	10 uA (max)		
Aging		±3ppm / Year (max)		

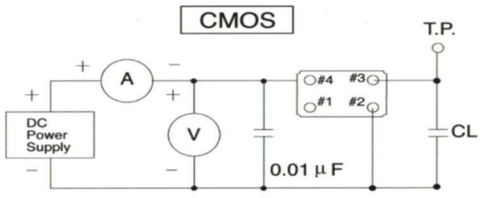
● DIMENSIONS (mm)



● OUTPUT WAVEFORM



● TEST CIRCUIT



*** Because S3 series has no by pass capacitor.
So, we recommend our customer to use capacitor 0.01µF in join Vcc and GND.