

• SCO-56&57&59 Series 5.0X3.2X1.3 mm

FEATURES

- 5X3.2X1.3 Miniature Package
- Tri-State Enable/Disable
- TTL/HCMOS compatible
- Tape and Reel
- IR Re-flow
- 3.3V Input Voltage
- 2.5V&1.8V Option

The SCO-56 series is an ultra miniature package clock oscillator with size of 5.0X3.2X1.3mm. It is mainly used in portable PC and telecommunication devices and equipment.



ELECTRICAL SPECIFICATIONS

Parameter	Condition	SCO-56	SCO-53	SCO-59	
Frequency Range	Fo	1.544MHz~125.000MHz			
Frequency Stability*		±25ppm, ±50ppm, ±100ppm			
Operating Temperature Range	T _{OPR}	0°C ~ 70°C (-40°C~+85°C option)			
Storage Temperature Range	T _{STRG}	-55°C~+125°C			
Power supply Voltage	V _{DD}	3.3V +/-10%	1.8V +/-10%	2.5V +/-10%	
Aging (First Year)		25°C ±3°C ±5ppm			
Supply Current	I _{DD}	1.544MHz to 9.999MHz	8mA Max	6mA Max	7mA Max
		10.000MHz to 34.999MHz	10mA Max	7mA Max	8mA Max
		35.000MHz to 49.999MHz	25mA Max	15mA Max	20mA Max
		50.000MHz to 125.000MHz	35mA Max	25mA Max	30mA Max
Output Symmetry	Sym	At 1/2V _{DD} 40/60%(45/55% Option)			
Rise time	T _r	10%V _{DD} ~90%V _{DD}	7nS Max	5nS Max	6nS Max
Fall Time	T _f	90%V _{DD} ~10%V _{DD}	7nS Max	5nS Max	6nS Max
Output Voltage	V _{OH}	90% V _{DD} min			
	V _{OL}	10% V _{DD} max			
Output Load	HCMOS Load	30pF Max(15pF type)			
Start-up Time		T _s	10mS Max		
Pin 1, tri-state function		Pin 1=H or open... Output active at pin 3 Pin 1=L... high impedance at pin 3			

*Include: 25°C tolerance, operating temperature range, input voltage change, aging, load change, shock and vibration

DIMENSIONS

Unit: mm

Pin	Connection
#1	Tri-State /NC
#2	GND
#3	Output
#4	+3.3V _{DD} (2.5V&1.8V)

Recommended Solder Pattern

***Note: A 0.01uF bypass capacitor should be placed between V_{DD}(Pin4) and GND(Pin2) to minimize power supply line noise