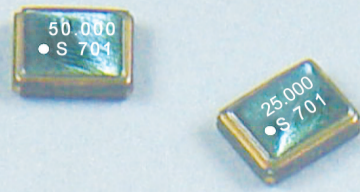


# CERAMIC SMD TYPE SCO-22



- Ceramic SMD package
- 0.9 / 1.8 / 2.5 / 3.3 supply voltage
- HCMOS output
- Stability to  $\pm 20\text{ppm}$
- Tri-state function available
- Reflow soldering is possible
- Available on tape and reel

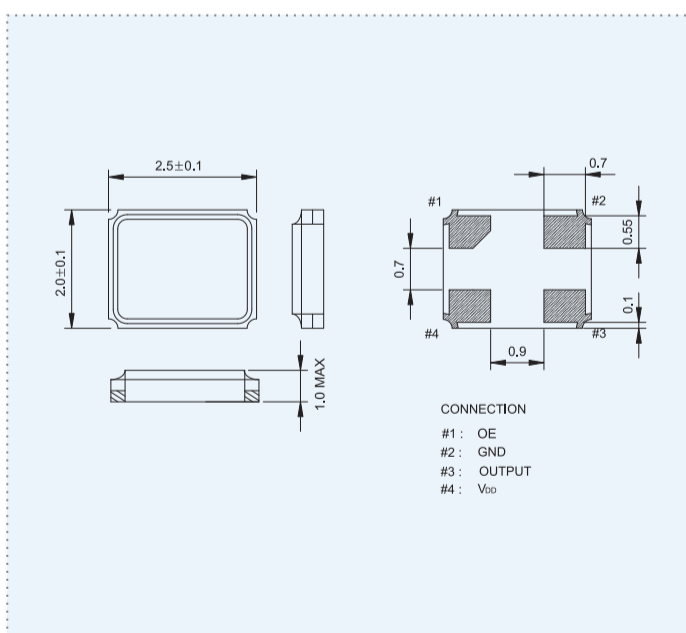
## ELECTRICAL SPECIFICATIONS

Frequency Range	1.000 to 50.000MHz	
Operating Temperature Range	0 to +70°C or -40 to +85°C	
Storage Temperature Range	-55 to +125°C	
Frequency Tolerance / Stability	Inclusive of Operating Temperature Range, Supply Voltage, and Load	100ppm, $\pm 50\text{ppm}$ or $\pm 25\text{ppm}$ , $\pm 20\text{ppm}$
Supply Voltage(V <sub>DD</sub> )	3.3, 2.5V <sub>DC</sub> $\pm 10\%$ , 0.9, 1.8V <sub>DC</sub> $\pm 5\%$	
Input Current	10mA max.	
Output Voltage Logic High(V <sub>OH</sub> )	w/HCMOS Load	90% of V <sub>DD</sub> min.
Output Voltage Logic Low(V <sub>OL</sub> )	w/HCMOS Load	10% of V <sub>DD</sub> max.
Rise / Fall Time	1.000 to 50.000MHz	10ns max.
Duty Cycle	50 $\pm 10\%$ (STD) 50 $\pm 5\%$ (Optional)	
Load Drive Capability	15pF HCMOS Load(STD)	
Output Enable Function	V <sub>IH</sub> : $\geq 0.7V_{DD}$ V <sub>IL</sub> : $\leq 0.3V_{DD}$	Enable Output Disable Output : High Impedance
Aging (at 25°C)	$\pm 3\text{ppm}$ , $\pm 5\text{ppm/year}$ max.	
Start-up Time	10ms max.	
Period Jitter : pk-pk	$\pm 100\text{ps}$ max.	
Period Jitter : One Sigma	$\pm 25\text{ps}$ max.	
Phase Jitter(12kHz to 20MHz)	1 ps max.	

## Part Numbering Guide

MODEL (PKG TYPE)	SUPPLY VOLTAGE	FREQUENCY STABILITY	OPER-TEMP RANGE	DUTY CYCLE	1PIN CONNETION	PACKING	FREQUENCY (MHZ)
SCO22	5 : 5.0V 3 : 3.3V 2 : 2.5V 1 : 1.8V	20 : $\pm 20\text{ppm}$ 25 : $\pm 25\text{ppm}$ 50 : $\pm 50\text{ppm}$ BLANK : $\pm 100\text{ppm}$ *20 : ONLY $\pm 50\text{ppm}$	A : -40 ~ +85°C B : -20 ~ +70°C BLANK : 0 ~ +70°C	D : 45 : 55 BLANK : 40 : 60	S : TRI-STATE H : E/D HIGH L : E/D LOW BLANK : NO-CONNECTION	BLANK : BULK R : TAPE & REEL	xx.xxx(STD) xx.xxxxxx

## MECHANICAL DIMENSIONS (mm)



## LAND PATTERN (mm)

