

# PRODUKT-INFO

## SCO-730/LV-PECL • SCO-730/LVDS SMD OSCILLATOR

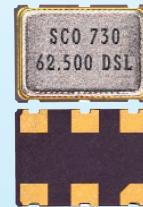
Low Voltage Positive Emitter Coupled Logic Differential Output

### FEATURES

1. Ultra miniature package clock oscillator with size of 7.0 x 5.0 x 1.8 mm.
2. Tri-State enable / disable.
3. Low jitter and noise.
4. Differential output (OECL, LVDS).

### APPLICATION

SONET, SDH, Gb Ethernet.



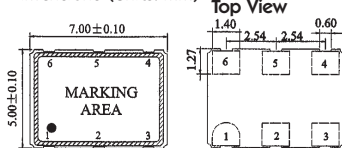
Actual Size



ELECTRICAL SPECIFICATIONS		
Model	SCO-730 LV-PECL	SCO-731 LVDS
Frequency Range	62.5 MHz ~ 200.0 MHz	72.5 MHz ~ 200.0 MHz
Frequency Stability	±25 ppm / ±50 ppm / ±100 ppm (All Conditions*)	
Operating Temperature Range	-20°C to +70°C, -40°C to +85°C option	
Storage Temperature Range	-55°C to +125°C	
Supply Voltage	3.3 V ±5%	
Current Consumption	90 mA max.	80 mA max.
Output Specification	LV-PECL	LVDS
Output Load	50 Ω to V <sub>DD</sub> -2.0 V	100 Ω Complimentary output
Output Voltage	„0“ Level: V <sub>OL</sub> : V <sub>DD</sub> 1.620 V max. „1“ Level: V <sub>OH</sub> : V <sub>DD</sub> 1.025 V min.	V <sub>OL</sub> : 1.1 V typical V <sub>OH</sub> : 1.4 V typical
Rise Time	1 ns max. at 20% V <sub>pp</sub> ~ 80% V <sub>pp</sub>	
Fall Time	1 ns max. at 80% V <sub>pp</sub> ~ 20% V <sub>pp</sub>	
Output Symmetry	45% ~ 60% at 1.25V, 45% ~ 55% option	
Differential Output Voltage	---	350 mV typical
Differential Output Error	---	50 mV max.
Offset Voltage	---	1.25 V typical
Offset Error	---	3m V typical
Integrated Phase Jitter (RMS)	1 ps max. (Integrated 12kHz ~ 20MHz)	
Start Time	10 ms max.	
Pin1, Tri-State Function	Pin 1= H or open ... Output active at Pin 4, 5 Pin1= L ... high impedance at Pin 4, 5	
Aging (at +25°C) first year	±2 ppm / year max.	

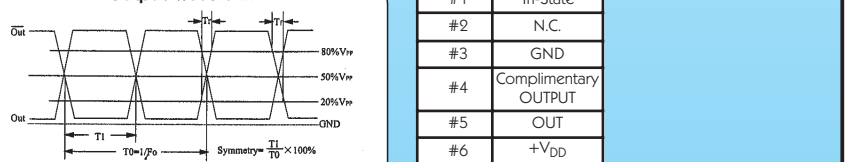
**OPTIONS:** 0.01 uF bypass capacitor should be placed between V<sub>DD</sub> (pin 6) and GND (pin 3) to minimize power supply line noise.  
\* Include: 25°C tolerance, operating temperature range, input voltage change, aging, load change, shock and vibration.

Dimensions (Units: mm)

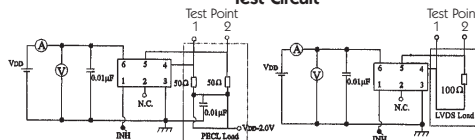


7.0 x 5.0 x 1.8

Output Waveform



Test Circuit



Terminal	Connection
#1	Tri-State
#2	N.C.
#3	GND
#4	Complimentary OUTPUT
#5	OUT
#6	+V <sub>DD</sub>

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All specifications subject to change without notice.