

# PRODUKT-INFO

## SCO-735/LV-PECL • SCO-735/LVDS SCO-735/HCSL • SMD OSCILLATOR

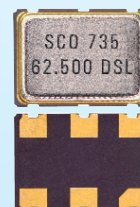
Low Voltage Positive Emitter Coupled Logic Differential Output

### 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 (LV-PECL, LVDS, HCSL).

### APPLICATION

SONET, SDH, Gb Ethernet.



Actual Size

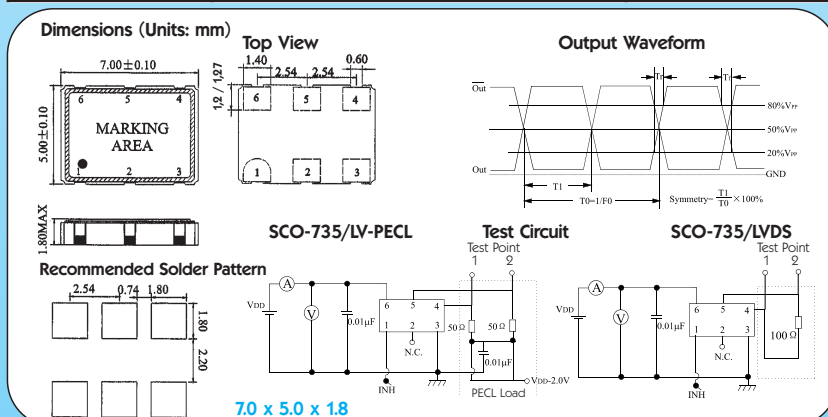


ELECTRICAL SPECIFICATIONS			
Model	SCO-735/LV-PECL	SCO-735/LVDS	SCO-735/HCSL
Frequency Range	13.5 MHz ~ 200.0 MHz		
Frequency Stability	±25 ppm / ±50 ppm / ±100 ppm (All Conditions*)		
Operating Temperature Range	-20°C to +70°C, -40°C to +85°C option	-10°C to +70°C, -40°C to +85°C option	
Storage Temperature Range	-55°C to +125°C	-55°C to +150°C	
Supply Voltage	3.3 V ±5%		
Current Consumption, at 15pF	50 mA max.	80 mA max.	30 mA max. (160.1 ~ 200.0 MHz)
Output Specification	LV-PECL	LVDS	HCSL
Output Load	50 Ω to V <sub>DD</sub> -2.0 V	100 Ω (complementary)	50 Ω**
Output Voltage	V <sub>DD</sub> 1.620 V max. V <sub>DD</sub> 1.025 V min.	1.1 V typical 1.4 V typical	-150min./0 typ./150 mV max. 660min./740 typ./850 mV max.
Rise Time	1 ns max. at 20% V <sub>pp</sub> ~ 80% V <sub>pp</sub>		0.15 ns typical
Fall Time	1 ns max. at 80% V <sub>pp</sub> ~ 20% V <sub>pp</sub>		0.4 ns max.
Output Symmetry	45% ~ 60% at 125V, 45% ~ 55% option		50% ±5%
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) at 12kHz ~ 20MHz	0.5 ps max.		0.2 ps typical, for 155.520 MHz (reference)
Start Time	10 ms max.		5 ms typical, 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 is not active		
Aging (at +25°C) first year	±2 ppm / year max.		±3 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.

\*\* to ground on each output



Terminal	LV-PECL/LVDS	HCSL
#1	Enable/Disable	
#2	N.C.	
#3	GND	
#4	Complementary OUTPUT	OUTPUT
#5	OUTPUT	Complementary OUTPUT
#6	V <sub>DD</sub>	

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All specifications subject to change without notice.