

# FREQUENCY SYNTHESIZERS

## NOW TO 34 GHz



### Standard specifications

Model No.	(SLSM5-12)	(SLSM5-14)	(SLSM5-48)	(SLSM5-612)	New (SLSM6-1225)	New (SLSM6-2434)
Frequency Range:	1 - 2 GHz	1 - 4 GHz	4 - 8 GHz	6 - 12 GHz	12 - 25 GHz	24 - 34 GHz
Multiplication:					Internal x2 Multiplier	Internal x2 Multiplier
Step Size:	1 kHz	1 kHz	1 kHz	1 kHz	1 kHz	1 kHz
Stability and Accuracy <sup>(note 1)</sup>						
External Reference: (Standard 10 MHz @ 0 dBm ±3 dB)	Same as input	Same as input	Same as input	Same as input	Same as input	Same as input
Internal TCXO Reference: <sup>(note 2)</sup>	±0.5 PPM	±0.5 PPM	±0.5 PPM	±0.5 PPM	±0.5 PPM	±0.5 PPM
Phase Noise in dBc/Hz (typ.):						
L(100 Hz)	-83	-79	-75	-72	-64	-65
L(1 kHz)	-99	-95	-87	-83	-74	-75
L(10 kHz)	-106	-100	-90	-85	-75	-75
L(100 kHz)	-103	-105	-92	-90	-83	-75
L(1 MHz)	-132	-128	-121	-117	-113	-110
L(10 MHz)	-148	-142	-140	-138	-133	-130
Spurious (typ.): <sup>(note 3)</sup>	-60 dBc	-60 dBc	-60 dBc	-60 dBc	-60 dBc	-60 dBc
Harmonics / Sub-Harmonics (typ.):	-17 dBc	-17 dBc	-17 dBc	-17 dBc	-17 / -17 dBc	-17 / -17 dBc
Power Out (typ. / min.) @ 25°C:	+15 / +13 dBm	+15 / +13 dBm	+15 / +13 dBm	+15 / +13	+15 / +13 dBm	+15 / +13 dBm
Power variation [freq. & temp] (max.):	±2 dB	±2 dB	±2 dB	±2 dB	±2 dB	±2 dB
Load VSWR (max.):	2:1	2:1	2:1	2:1	2:1	2:1
Frequency control: <sup>(note 4)</sup>	RS-485	RS-485	RS-485	RS-485	RS-485	RS-485
Acquisition time (typ.):	<5 msec.	<5 msec.	<5 msec.	<5 msec.	<5 msec.	<5 msec.
Phase-lock indicator (LD): <sup>(note 5)</sup>	Open Collector	Open Collector	Open Collector	Open	Open Collector	Open Collector
Supply Voltage (Vcc):	+5.5 Vdc ±0.5 V	+5.5 Vdc ±0.5 V	+5.5 Vdc ±0.5 V	+5.5 Vdc ±0.5	+5.5 Vdc ±0.5 V	+5.5 Vdc ±0.5 V
Supply Current (Icc):	600 mA	600 mA	600 mA	650 mA	1 A	1 A
RF Output Connector:	SMA	SMA	SMA	SMA	2.92mm	2.92mm

Above are some standard units – many additional units are also available

Part Number Construction: SLSM5-xxxx-y-z

xx = start frequency in GHz

xx = stop frequency in GHz

y = internal reference option (-INT or -OX)

z = TTL LD option (-T)

Examples: **SLSM5-48**

4 - 8 GHz synthesizer, external 10 MHz reference, LD open collector

**SLSM5-612-INT-T**

6 - 12 GHz synthesizer, internal TCXO reference, LD TTL

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