

Phase-Locked Oscillators

Standard Products

TV Series

Single Frequency Single Output (SFSO)

Part Number	Selectable Frequency Range (GHz)	Pout (dBm)	Phase Noise at 100 kHz offset (6 GHz) (dBc/Hz)	Supply Voltage (V)	Package
SFSO-TVS6-(freq)-S/E/C	0.05 - 6	+1 to +5	120 (RF = 1.2 GHz) -108 (RF = 4.8 GHz)	7	S, E or C *4
SFSO-TV01-(freq)-S/E/C	2 - 16 *2	-7 to +6 *3	-92.5 (RF = 6 GHz) -86.5 (RF = 12 GHz)	7	S, E or C *4
SFSO-TV02-(freq)-C	16 - 32	+10 to +15	-89.2 (RF = 24 GHz) -87.0 (RF = 28 GHz)	7	Connectorized
SFSO-TV03-(freq)-C	32 - 45	+12 to +18	-77.5 (RF = 32 GHz) -74.1 (RF = 44 GHz)	7	Connectorized

Multiple Frequency Single Output (MFSO)

Part Number	Selectable Frequency Range (GHz)	Frequency sets	Minimum Step Size (MHz)	Pout (dBm)	Phase Noise at 100 kHz offset (6 GHz) (dBc/Hz)	Supply Voltage (V)	Package
MFSO-TVS6-(freq)-S/E/C	0.05 - 6	Up to 32	1	+1 to +5	-120 (RF = 1.2 GHz) -108 (RF = 4.8 GHz)	7	S, E or C *4
MFSO-TV01-(freq)-S/E/C	2 - 16 *2	Up to 32	1	-7 to +6 *3	-92.5 (RF = 6 GHz) -86.5 (RF = 12 GHz)	7	S, E or C *4
MFSO-TV02-(freq)-C	16 - 32	Up to 32	2	+10 to +15	-89.2 (RF = 24 GHz) -87.0 (RF = 28 GHz)	7	Connectorized
MFSO-TV03-(freq)-C	32 - 45	Up to 32	4	+12 to +18	-77.5 (RF = 32 GHz) -74.1 (RF = 44 GHz)	7	Connectorized

Order example

If you need to order multiple frequency PLO, please list the frequencies you need. For example:

Example 1:
20, 21, 22, 23, 24, 25, 26, 27, 28 GHz (9 frequencies)

Example 2:
20 to 28 GHz (step 1 GHz)

*2 RF 1 frequency range is 1.925 to 8 GHz, RF 2 frequency range is 7.7 to 16 GHz

*3 Pout at RF 1 is +2 to +8 dBm, Pout at RF 2 is -1 to +5 dBm

*4 S for SMT, E for evaluation board, and C for connectorized module

Phase-Locked Oscillators

JF Series

Single Frequency Single Output (SFSO)

Part Number	Selectable Frequency Range (GHz)	Pout (dBm)	Phase Noise at 100 kHz offset (dBc/Hz)	Supply Voltage	Package
SFSO-JF01-(freq)-S/E/C	0.2 - 18	+10 to +14	-112 (RF = 12 GHz)	7	S, E or C *4
SFSO-JF02-(freq)-C	15 - 36	TBD	-106 (RF = 24 GHz)	7	Connectorized
SFSO-JF03-(freq)-C	30 - 45	TBD	TBD	7	Connectorized

Multiple Frequency Single Output (MFSO)

Part Number	Selectable Frequency Range (GHz)	Frequency sets	Minimum Step Size (MHz)	Pout (dBm)	Phase Noise at 100 kHz offset (6 GHz) (dBc/Hz)	Supply Voltage (V)	Package
MFSO-JF01-(freq)-S/E/C	0.2 - 18	Up to 32	1	+10 to +14	-112 (RF = 12 GHz)	7	S, E or C *4
MFSO-JF02-(freq)-C	15 - 36	Up to 32	2	TBD	-106 (RF = 24 GHz)	7	Connectorized
MFSO-JF03-(freq)-C	30 - 45	Up to 32	4	TBD	TBD	7	Connectorized

Dielectric Resonator Oscillators (DRO)

Dielectric Resonator Oscillator (DRO) utilizes the advantage of the dielectric resonator design for ultra low phase noise, high Q and excellent frequency stability and control. It is ideal for commercial, military and SATCOM applications whom requires high stability and low phase noise signal sources in their systems. Some of our DRO features are listed below:

- Ultra low phase noise
- Low harmonics
- Low spurs

Customization Guideline

We can customize DRO for you. Please reference to the below specification. For more details, please contact us and tell us the exact specification you need and we will design it for you. operation@mytek.com

Parameter	Specifications	Unit
Maximum Frequency	18	GHz
Output Power (typ.)	3	dBm
Typical SSB Phase Noise		
@100 Hz	-63	dBc/Hz
@1 kHz	-81	dBc/Hz
@10 kHz	-88	dBc/Hz
@100 kHz	-102	dBc/Hz
@1 MHz	-123	dBc/Hz
Harmonics (max.)	-20	dBc
Spurs (max.)	-80	dBc
Supply Voltage	6 -24	Vdc
Current Consumption	100	mA
VSWR (max.)	2:1	
Operating Temperature	-45 to +85	°C
RF Connectors	Female SMA	

Signal Generators

TMYTEK's signal generators (TSGs) are portable and reliable signal sources that offer industry standard performances. The signal generators are available in broad frequencies range up to 45 GHz, and are optimized for commercial wireless, instrumentations, healthcare devices, aerospace and military applications.

TMYTEK offers both single channel and dual channel options on some of our TSG series. The two channels are isolated channels that offer its own frequency and power adjustments. Both can be controlled by our in house designed software control program via USB or Ethernet interface.

Standard Products

TV Series

Part Number	Frequency Range (GHz)	Frequency Resolution (kHz)	Pout Range (dBm)	Pout Step (dB)	Phase Noise at 100 kHz offset (dBc/Hz)	Supply Voltage (V)	No. of Channels	Package
TSG-TVS6-S/D	0.05 - 6	1	-13 to 12	0.5	-120 (RF = 1.2 GHz) -108 (RF = 4.8 GHz)	7	S or D*5	Connectorized
TSG-TV01-S/D	2 - 16	2	- to 12	0.5	-92.5 (RF = 6 GHz) -86.5 (RF = 12 GHz)	7	S or D*5	Connectorized
TSG-TV02-S	16 - 32	4	-11 to +14	0.5	-89.2 (RF = 24 GHz) -87.0 (RF = 28 GHz)	7	Single	Connectorized
TSG-TV03-S	32 - 45	8	-1 to +13	0.5	-77.5 (RF = 32 GHz) -74.1 (RF = 44 GHz)	7	Single	Connectorized

JF Series

Part Number	Frequency Range (GHz)	Frequency Resolution (kHz)	Pout Range (dBm)	Pout Step (dB)	Phase Noise at 100 kHz offset (dBc/Hz)	Supply Voltage (V)	No. of Channels	Package
TSG-JF01-S/D	0.2 - 18		-13 to 12	0.5	-112 (RF = 12 GHz)	7	S or D*5	Connectorized
TSG-JF02-S	15 - 45	2	TBD	0.5	-106 (RF = 24 GHz)		Single	Connectorized

*5 S for single channel, and D for dual channel