PLL(Phase Locked Loop)

◈ Specification (Customized Specification is available)

TYPE	Part No.	Frequency (MHz)	Power (dBm)	PDF (KHz)	Phase Noise @10KHz(dBc/Hz)	Harmonics (dBc)	REF FREQ. (MHz)		PLL IC
							Internal	External	
SA-TYPE (9.8x9.3mm)	SEP-5SA745	745	0 ± 2	50	-106	-22		10	LMX 2331
	SEP-5SA790	790	0 ± 2	50	-105	-23		10	LMX 2331
	SEP-5SA842	842	0 ± 2	50	-105	-24		10	LMX 2331
	SEP-5SA997	997	0 ± 2	50	-105	-22		10	LMX 2331
	SEP-5SA1616	1600~1633	5 ± 2	50	-100	-25		10	LMX 2331
	SEP-5SA1679R6	1679.6	5 ± 2	50	-102	-25		10	LMX 2331
	SEP-5SA1690	1670~1690	7 ± 2	160	-100	-17		19.2	LMX 2354
	SEP-5SA1855	1855	0 ± 2	50	-104	-25	.	10	LMX 2331
	SEP-5SA1950	1930~1970	7 ± 2	160	-100	-17		19.2	LMX 2354
	SEP-5SA2047R6	2047.6	5 ± 2	50	-102	-25		10	LMX 2331
	SEP-5SA2327	2300~2354	5 ± 2	200	-100	-17		10	LMX 2354
	SEP-5SA2409R2	2382~2436	5 ± 2	200	-100	-17		10	LMX 2354
	SEP-5SA5800	5820~5840	3 ± 1.5	2500	-86	-30		10	LMX 4113
VC-TYPE (12.7x12.7mm)	SEP-5VC384	384	0 ± 2	50	-110	-17	13		LMX 2331
	SEP-5VC822R9	822.9	3 ± 2	50	-105	-20	13		LMX 2331
	SEP-5VC862	862	5 ± 2	50	-106	-26	13		LMX 2331
	SEP-5VC951R5	951.5	Min -1	50	-105	-20	13		LMX 2331
	SEP-5VC1646R3	1646.3	Min 7	50	-100	-27	13		LMX 2331
	SEP-5VC1705A	1705	3 ± 2	50	-99	-29	13		LMX 2331
	SEP-5VC1866R1	1866.1	7 ± 2	50	-101	-24	13		LMX 2331
	SEP-5VC1881R3	1881.3	Min 7	50	-101	-24	13		LMX 2331
	SEP-5VC1907R4	1907.4	7 ± 2	200	-96	-23	13		ADF 4113
	SEP-5VC1935	1935	3 ± 2	50	-102	-27	13		LMX 2331
	SEP-5VC2040	2040	5 ± 2	500	-95	-26	13		ADF 4113
	SEP-5VC2070A	2070	8 ± 2	50	-100	-20	13		LMX 2331
	SEP-5VC2090	2090	5 ± 2	50	-100	-22	13		LMX 2331
	SEP-5VC2114R5	2114.5	5 ± 2	50	-100	-23	13		LMX 2331
	SEP-5VC2120	2120	5 ± 2	50	-100	-23	13		LMX 2331
VT-TYPE (12.7x12.7mm)	SEP-5VT839R9	837~842	5 ± 2	50	-105	-21	13		LMX 2331
	SEP-5VT1825	1897.5~1852.5	3 ± 2	100	-99	-21	13		LMX 2331
	SEP-5VT1830	1830	8 ± 2	50	-99	-27	13		LMX 2331
	SEP-5VT2020	2010~2030	8 ± 2	50	-100	-20	13		LMX 2331
	SEP-5VT2060A	2050~2070	8 ± 2	50	-100	-21	13		LMX 2331
	SEP-5VT2072R5	2070.1~2075.1	7 ± 2	100	-100	-23	13		ADF 4113
	SEP-5VT2262R5	2260.1~2265.1	7 ± 2	100	-100	-30	13		ADF 4113
VF-TYPE (12.7x12.7mm)	SEP-5VF842R8	842.8	0 ± 2	50	-106	-32		10	LMX 2331

◈ Specification (Customized Specification is available)

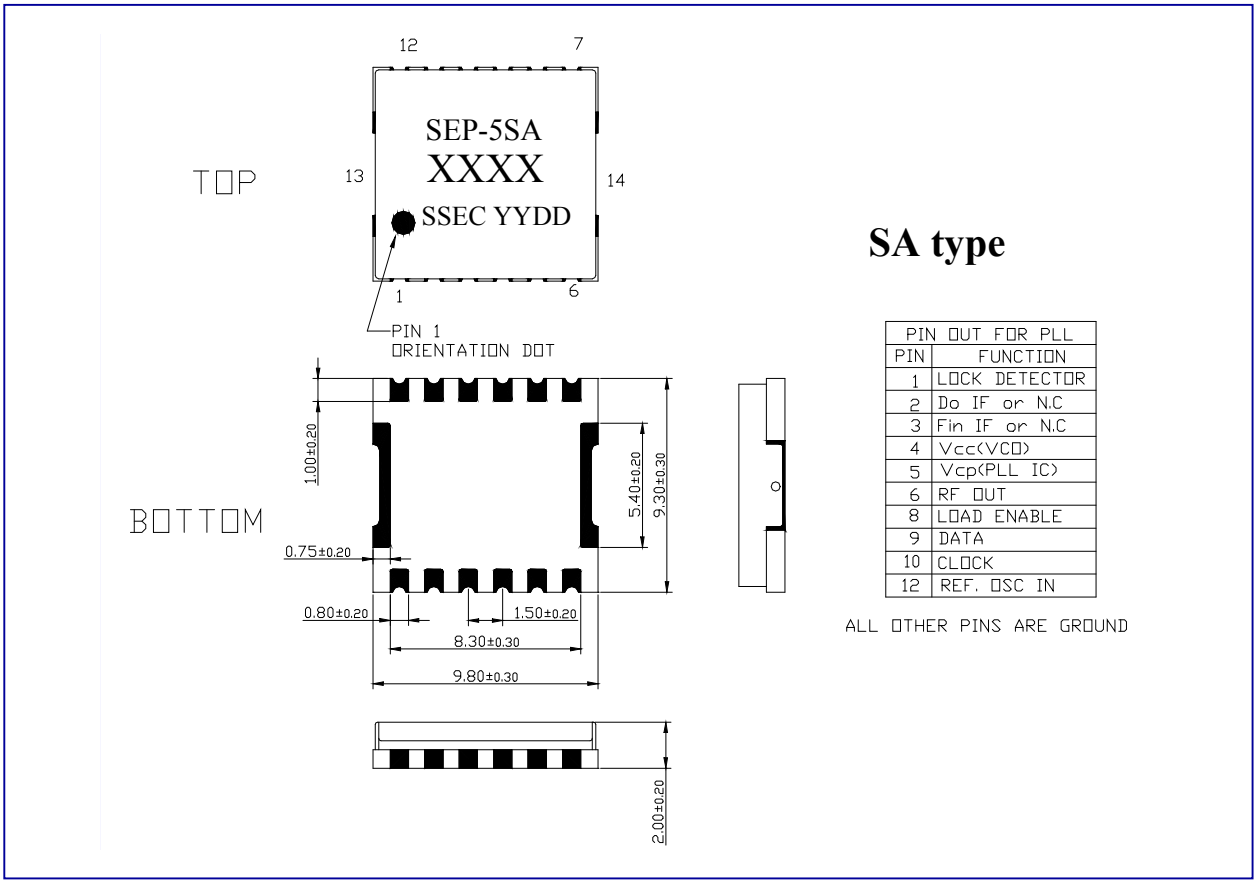
TYPE	Part No.	Frequency (MHz)	Power (dBm)	PDF (KHz)	Phase Noise @10KHz(dBc/Hz)	Harmonics (dBc)	REF FREQ. (MHz)		PLL IC
							Internal	External	
A-TYPE (19x19mm)	KSP-5A631	625~637	1 ± 2	125	-104	-25		10	ADF 4153
	KSP-5A800	785~815	0 ± 3	100	-105	-22		10	LMX 2326
	KSP-5A1665A	1635~1695	1 ± 2	125	-100	-35		10	ADF 4153
	KSP-5A1950R38	1930.38~1970.38	5 ± 2	10	-98	-28		10	LMX 2326
	KSP-5A2040D	2010~2070	0 ± 3	100	-104	-25		10	LMX 2326
	KSP-5A2110A	2080~2140	Typ 0	125	-104	-20		10	ADF 4153
	KSP-5A2182	2132~2232	1 ± 2	125	-103	-25		10	ADF 4153
	KSP-5A2382	2332~2432	1 ± 2	125	-101	-32		10	ADF 4153
	KSP-5A2472	2422~2522	3 ± 2	125	-99	-28		10	ADF 4153
	KSP-5A2535	2500~2570	1 ± 2	125	-102	-19		10	ADF 4153
	KSP-5A2800	2765~2835	1 ± 2	125	-99	-19		10	ADF 4153
F-TYPE (19x19mm)	KSP-5F155	155	Typ 3	100	-107	-18		10	LMX 2326
	KSP-5F731R5	731.5	Min5	500	-106	-18		10	LMX 2326
	KSP-5F863	863	0 ± 3	500	-101	-20		10	ADF 4153
	KSP-5F1005R5	1005.5	0 ± 3	500	-101	-20		10	ADF 4153
	KSP-5F1485	1485	0 ± 3	500	-97	-20		10	ADF 4153
	KSP-5F1690C	1690	0 ± 3	500	-104	-23		10	LMX 2326
	KSP-5F1865	1865	3 ± 2	500	-103	-30		10	LMX 2326
	KSP-5F1907R4B	1907.4	Min 6	200	-106	-18		10	ADF 4153
	KSP-5F2077R6A	2077.6	4 ± 2	400	-105	-23		10	ADF 4153
	KSP-5F2220	2220	0 ± 2	500	-103	-19		10	LMX 2326
	KSP-5F2349R5	2349.5	0 ± 2	500	-102	-19		10	LMX 2326
T-TYPE (19x19mm)	KSP-5T85R5	84~87	Min 0	50	-118	-18	13		LMX 2326
	KSP-5T342R5	338~347	2 ± 2	50	-113	-20	13		LMX 2326
	KSP-5T1950R38	1920.38~1980.38	5 ± 2	10	-95	-25	13		LMX 2326
	KSP-5T2072R5	2070.1~2075.1	7 ± 2	100	-96	-20	13		ADF 4118
	KSP-5T2262R5	2260.1~2265.1	7 ± 2	100	-96	-23	13		ADF 4118
C-TYPE (19x19mm)	KSP-5C50	50	5 ± 2	50	-112	-14	13		LMX 2326
	KSP-5C100	100	5 ± 2	100	-114	-22	13		LMX 2326
	KSP-5C200	200	5 ± 2	100	-112	-29	13		LMX 2326
	KSP-5C384	384	1 ± 2	100	-11	-19	13		LMX 2326
	KSP-5C825R255	825.255	5 ± 2	5	-103	-24	13		LMX 2326
	KSP-5C1539R5	1539.5	Min 0	500	-105	-21	13		LMX 2326
	KSP-5C1705B	1705	3 ± 2	500	-105	-24	13		LMX 2326
	KSP-5C1870	1870	3 ± 2	500	-105	-18	13		LMX 2326
	KSP-5C1945R3B	1975.3	0 ± 2	100	-107	-28	13		ADF 4153
	KSP-5C2035A	2035	-3 ± 2	500	-102	-24	13		LMX 2326
	KSP-5C2148	2148	6 ± 2	500	-99	-23	13		ADF 4153
	KSP-5C2278	2278	6 ± 2	500	-101	-25	13		ADF 4118
	KSP-5C2309	2309	0 ± 2	1000	-101	-29	13		LMX 2326
	KSP-5C2421	2421	5 ± 2	500	-103	-29	13		ADF 4153
	KSP-5C2644	2644	6 ± 2	1000	-97	-13	13		ADF 4118
	KSP-5C2908	2908	6 ± 2	500	-98	-20	13		ADF 4118

◈ Type Table

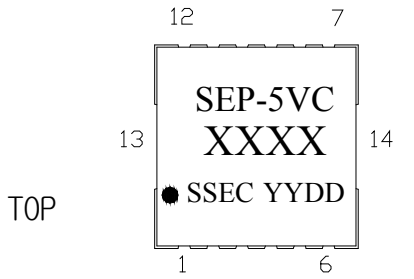
SIZE	TYPE	FREQ.	PICROM	TCXO
9.8x9.3mm	SA-TYPE	Variable	External	External
12.7x12.7mm	VC-TYPE	Fixed	Internal	Internal
	VT-TYPE	Variable	External	Internal
	VF-TYPE	Fixed	Internal	External
	VA-TAPE	Variable	External	External
19x19mm	C-TYPE	Fixed	Internal	Internal
	T-TYPE	Variable	External	Internal
	F-TYPE	Fixed	Internal	External
	A-TYPE	Variable	External	External

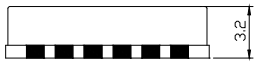
◈ Dimension

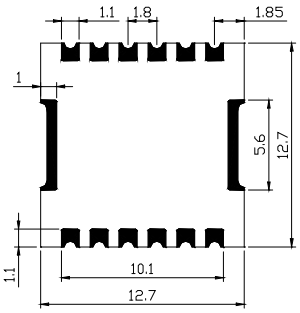
▶ 9.8 x 9.3 mm



▶ 12.7 x 12.7 mm







VC type

PIN OUT FOR PLL	
PIN	FUNCTION
1	GND
2	GND
3	GND
4	GND
5	GND
6	GND
7	Vcc(VCO)
8	GND
9	RF OUT
10	GND
11	Vcp(PLL IC)
12	LOCK DETECTOR
13	GND
14	GND

VT type

PIN OUT FOR PLL	
PIN	FUNCTION
1	Clock
2	Data
3	Enable
4	N.C
5	GND
6	GND
7	Vcc(VCO)
8	GND
9	RF OUT
10	GND
11	Vcp(PLL IC)
12	LOCK DETECTOR
13	GND
14	GND

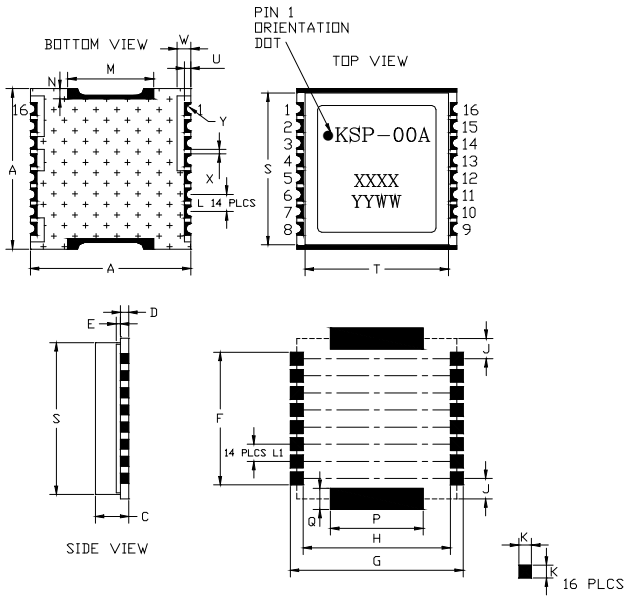
VA type

PIN OUT FOR PLL	
PIN	FUNCTION
1	Clock
2	Data
3	Enable
4	OSC IN
5	GND
6	GND
7	Vcc(VCO)
8	GND
9	RF OUT
10	GND
11	Vcp(PLL IC)
12	LOCK DETECTOR
13	GND
14	GND

VF type

PIN OUT FOR PLL	
PIN	FUNCTION
1	GND
2	GND
3	GND
4	OSC IN
5	GND
6	GND
7	Vcc(VCO)
8	GND
9	RF OUT
10	GND
11	Vcp(PLL IC)
12	LOCK DETECTOR
13	GND
14	GND

▶ 19 x 19 mm



SYMBOL	DIMENSION MILLIMETERS
A	19.05 ± 0.25
C	6.50 MAX
D	1.05 MAX
E	0.71
F	15.45
G	20.5
H	17.5
J	2.55
K	1.50
L	2.00 ± 0.05
L1	2.00
S	18.0
T	17.70
U	1.20
W	2.0
X	0.60
Y	R = 0.50
M	10.2
N	1.25
P	11.0
Q	2.5

A type

PIN OUT FOR PLL			
PIN	APPLICATION	PIN	APPLICATION
1	CLOCK	9	VCC (VCO)
2	DATA	13	RF OUT
3	ENABLE	15	VCC (CHIP)
4	OSC IN	16	LOCK DETECT

ALL OTHER PINS ARE GROUND

F type

PIN OUT FOR PLL			
PIN	APPLICATION	PIN	APPLICATION
1	Suspend(NC)	9	Vcc (VCO)
2	Suspend(NC)	13	RF OUT
3	Suspend(NC)	15	Vcp (PLL IC)
4	OSC IN	16	LOCK DETECT

ALL OTHER PINS ARE GROUND

T type

PIN OUT FOR PLL			
PIN	APPLICATION	PIN	APPLICATION
1	CLOCK	13	RF OUT
2	DATA	15	VCC (CHIP)
3	ENABALE	16	LOCK DETECT
9	VCC (VCO)		

ALL OTHER PINS ARE GROUND

C type

PIN OUT FOR PLL			
PIN	APPLICATION	PIN	APPLICATION
9	VCC (VCO)	15	VCC (CHIP)
13	RF OUT	16	LOCK DETECT

ALL OTHER PINS ARE GROUND