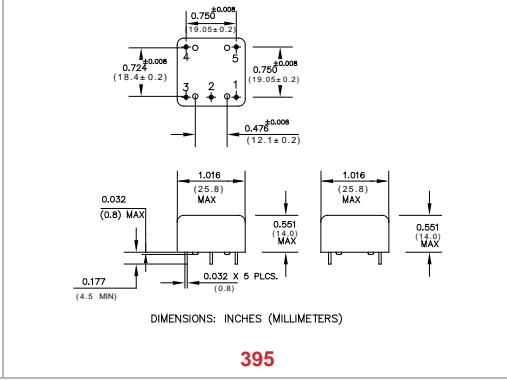
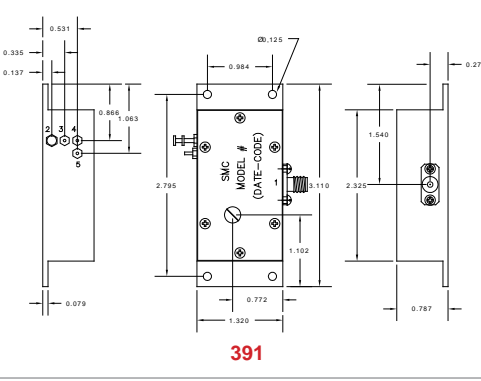
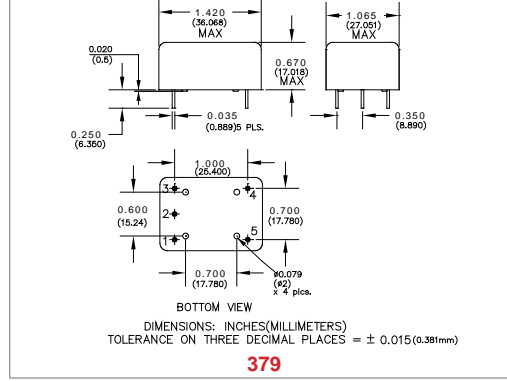
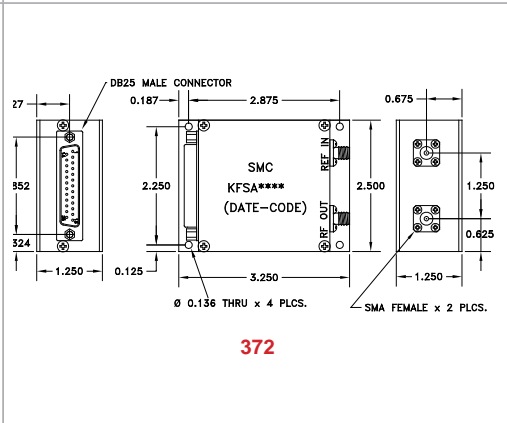
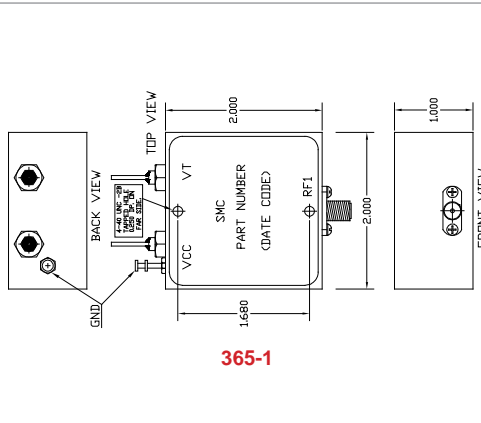
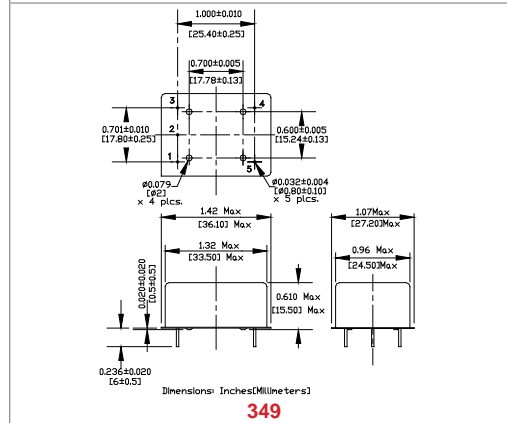
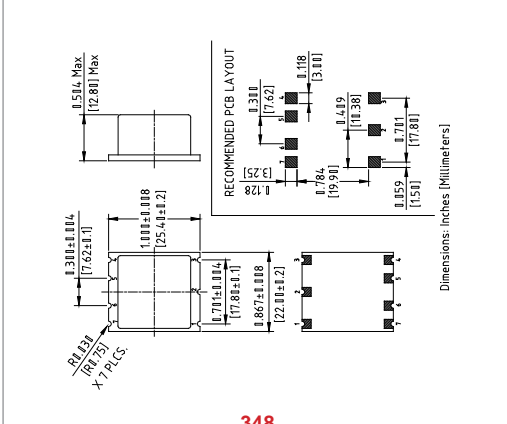
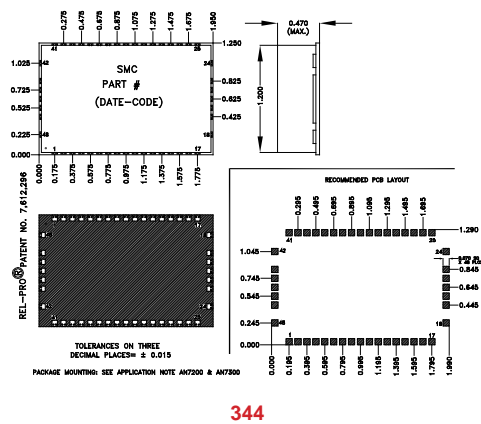
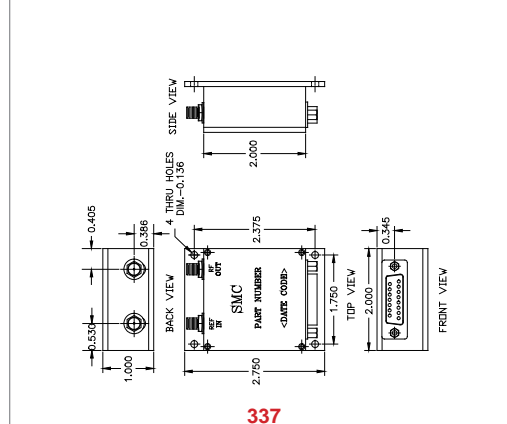
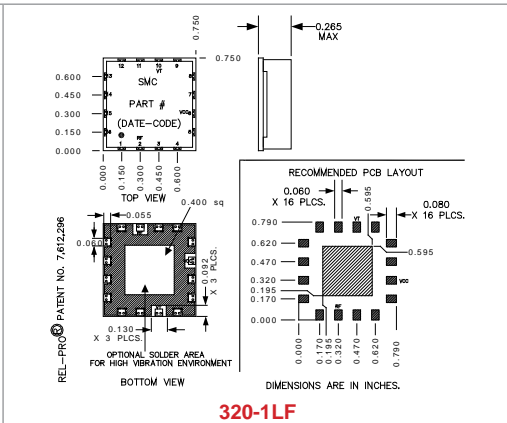
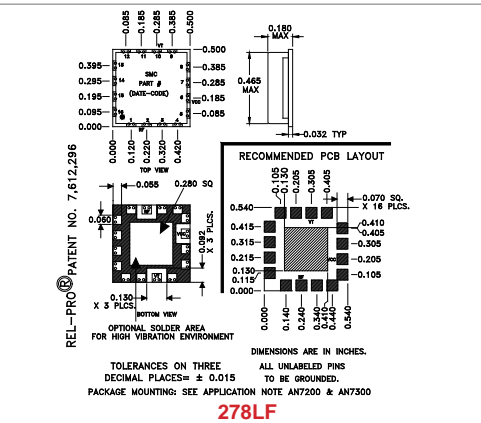
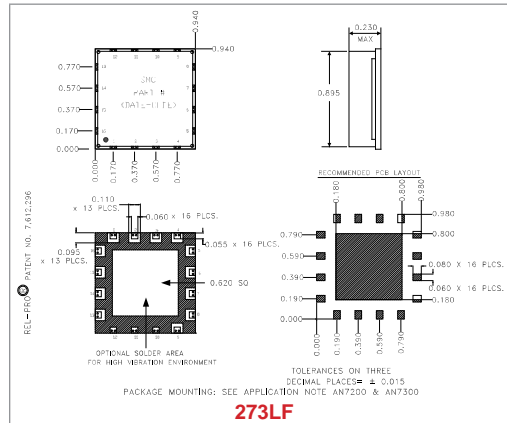
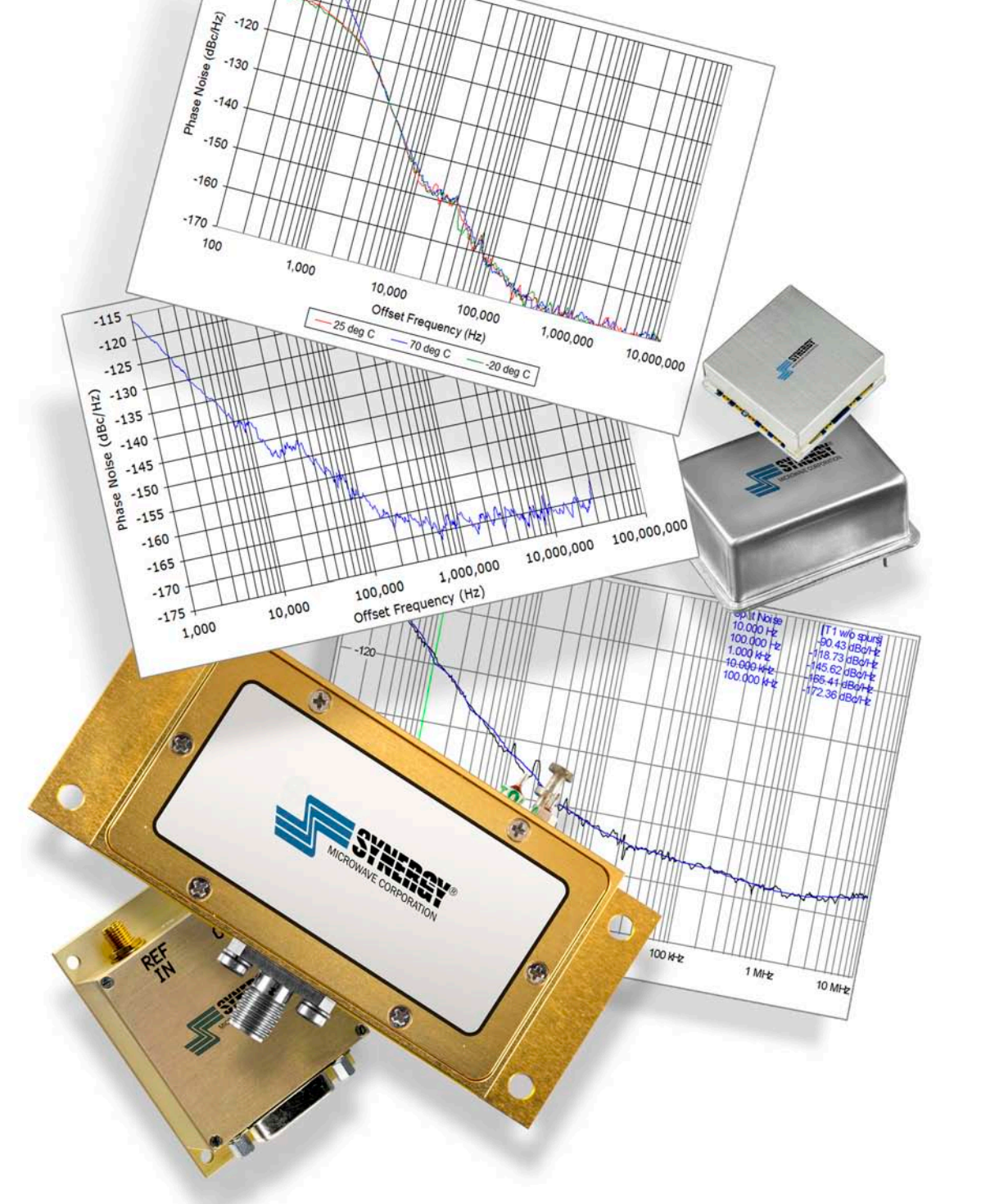


# OUTLINE DRAWINGS



# HIGH PERFORMANCE

# FREQUENCY SOURCES



REFERENCE TRANSLATORS												
Model	Frequency ( MHz )	Reference Input Frequency ( MHz )	Reference Input Level	DC Bias VDC	Minimum Output Power ( dBm )	Spurious Suppression ( dBc ) [ Typ. ]	Harmonic Suppression (dB) [ Typ. ]	Phase Noise ( dBc/Hz ) [ Typ. ]				PKG# *
								100 Hz offset	1kHz offset	10 kHz offset	100 kHz offset	
FCTS800-10-5	800	10	1.0 - 3.3 VDC, p-p	+5; +12	0	80	10	-87	-116	-144	-158	273LF
KFCTS800-10-5	800	10	1.0 - 3.3 VDC, p-p	+5; +12	0	80	10	-87	-116	-144	-158	337
FCTS1000-10-5	1000	10	1.0 - 3.3 VDC, p-p	+5; +12	-3	80	25	-80	-115	-141	-158	273LF
KFCTS1000-10-5	1000	10	1.0 - 3.3 VDC, p-p	+5; +12	-3	80	25	-80	-115	-141	-158	337
FSA1000-100	1000	100	1.0 - 3.3 VDC, p-p	+3.3; +5; +12v	+5	80	15	-105	-115	-145	-160	344
KFSA1000-100	1000	100	1.0 - 3.3 VDC, p-p	+12v	+5	80	15	-105	-115	-145	-160	372
FXLNS-1000	1000	100	+13 ± 3 dBm	+5; +12	-2	55	35	-120	-140	-149	-154	344

OVEN CONTROLLED CRYSTAL OSCILLATORS												
Model	Frequency ( MHz )	Frequency Tuning Range ( PPM )	Tuning Voltage Range ( VDC )	DC Bias VDC [ Typ. ]	Minimum Output Power ( dBm )	Harmonics ( dBc ) [ Typ. ]	Frequency Stability ( ppm ) [ Typ. ]	Phase Noise ( dBc/Hz ) [ Typ. ]				PKG# *
								100 Hz offset	1kHz offset	10 kHz offset	100 kHz offset	
OXO10-1-348	10	+/-0.5 to +/- 1.5	0 - 5	+12 @ 200 mA	+5	≤ -20	<5x10 <sup>-9</sup>	-150	-160	-165	-170	348
OXO10-1-349	10	≥ +/-0.4	0 - 5	+12 @ 200 mA	+3	≤ -30	<7x10 <sup>-9</sup>	-150	-155	-165	-165	349
OXO100-1-349	100	≥ +/-1.5	0 - 10	+12 @ 150 mA	+7	≤ -30	<5x10 <sup>-8</sup>	-130	-153	-165	-170	349
OXO100-1-365	100	≥ +/-1.5	0 - 10	+12 @ 150 mA	+7	≤ -30	<5x10 <sup>-8</sup>	-130	-153	-165	-170	365-1
OXO100-395L	100	≥ +/-3	0 - 10	+12 @ 120 mA	10	≤ -30	<5x10 <sup>-8</sup>	-125	-157	-173	-177	395
OXO100-395M	100	≥ +/-3	0 - 10	+12 @ 120 mA	10	≤ -30	<5x10 <sup>-8</sup>	-130	-160	-173	-175	395
OXO100-395H	100	≥ +/-3	0 - 10	+12 @ 120 mA	10	≤ -30	<5x10 <sup>-8</sup>	-135	-162	-170	-172	395
OXO120-1-349	120	≥ +/-2	0 - 10	+12 @ 150 mA	+7	≤ -25	<2x10 <sup>-7</sup>	-125	-150	-160	-168	349

HIGH PERFORMANCE CRYSTAL OSCILLATORS												
Model	Frequency ( MHz )	Frequency Tuning Range ( PPM )	Aging ( PPM/year )	DC Bias VDC [ Typ. ]	Minimum Output Power ( dBm )	Jitter ( fsec ) [ Max ]	Frequency Stability ( ppm ) [ Typ. ] ( over temperature )	Phase Noise ( dBc/Hz ) [ Typ. ]				PKG# *
								100 Hz offset	1kHz offset	10 kHz offset	100 kHz offset	
HPXO100	100	+/-5	+/-0.3	+12 @ 120 mA	+10	10	<+/-0.2	-140	-162	-174	-183	379
KHPXO100	100	+/-5	+/-0.3	+12 @ 120 mA	+10	10	<+/-0.2	-140	-162	-174	-183	365-1
HPXO125	125	+/-5	+/-0.3	+12 @ 120 mA	+10	10	<+/-0.2	-140	-162	-174	-183	379
HPXO128	128	+/-5	+/-0.3	+12 @ 120 mA	+10	10	<+/-0.2	-138	-160	-172	-180	379

HIGH PERFORMANCE SAW VCOS												
Model	Frequency ( MHz )	Tuning Voltage ( VDC )	DC Bias VDC @ I ( Max. )	Minimum Output Power ( dBm )	Tuning Sensitivity ( kHz/V ) [Typ.]	Harmonic Suppression (dB) [Typ]	Frequency Pulling kHz/V ( Typ. @ 1.75:1 VSWR )	Phase Noise ( dBc/Hz ) [ Typ. ]				PKG# *
								1 kHz offset	10 kHz offset	100 kHz offset	1 MHz offset	
HFSO640-5	640	0.5 - 12	+5 VDC @ 35 mA	+6	20	23	10	-122	-151	-162	-170	278LF
HFSO745R84-5	745.84	0.5 - 12	+5 VDC @ 35 mA	+3	20	12	10	-115	-147	-161	-170	278LF
HFSO776R82-5	776.82	0.5 - 12	+5 VDC @ 35 mA	+6	15	12	10	-114	-146	-161	-170	278LF
HFSO800-5	800	0.5 - 12	+5 VDC @ 20 mA	+3	18	20	10	-119	-146	-164	-170	278LF
HFSO800-5L	800	0.5 - 12	+5 VDC @ 20 mA	+3	18	20	10	-110	-142	-162	-170	278LF
HFSO914R8-5	914.8	0.5 - 12	+5 VDC @ 35 mA	+4	30	29	10	-109	-139	-161	-170	278LF
HFSO1000-5	1000	0.5 - 12	+5 VDC @ 35 mA	+2	20	25	10	-111	-141	-160	-170	278LF
HFSO1000-5L	1000	0.5 - 12	+5 VDC @ 35 mA	+2	20	25	10	-108	-138	-160	-170	278LF
HFSO1600-5L	1600	0.5 - 12	+5 VDC @ 100 mA	+14	38	18	15	-104	-133	-161	-170	320-1LF
HFSO1600-5	1600	0.5 - 12	+5 VDC @ 100 mA	+14	38	18	15	-109	-137	-161	-170	320-1LF
HFSO2000-5L	2000	0.5 - 12	+5 VDC @ 100 mA	+6	35	20	15	-104	-133	-159	-168	320-1LF
HFSO2000-5	2000	0.5 - 12	+5 VDC @ 100 mA	+6	35	20	15	-107	-137	-159	-168	320-1LF

DIELECTRIC RESONATOR OSCILLATOR												
Model	Frequency ( GHz )	Tuning Voltage ( VDC )	DC Bias VDC @ I ( Max. )	Minimum Output Power ( dBm )	Tuning Sensitivity ( MHz/V ) [Typ.]	Harmonic Suppression (dB) [Typ]	Jitter ( fs )	Phase Noise ( dBc/Hz ) [ Typ. ]				PKG
								1 kHz offset	10 kHz offset	100 kHz offset	1 MHz offset	
DRO100	10	1 - 15	+7 - 10 VDC @ 70 mA	+8	0.3	20	35	-81	-111	-137	-158	391
DRO1024	10.24	1 - 15	+7 - 10 VDC @ 70 mA	+7	0.4	40	53	-79	-109	-136	-158	391

\* See last page for outline drawings.



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