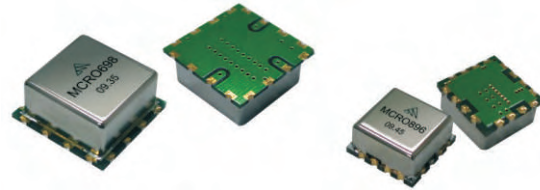


### Features

- Ceramic coaxial resonator, Low phase noise
- Two standard packages
- Frequency 400~5000MHz
- ROHS Compliant



Part number	Frequency MHz	Tuning Voltage V	Tuning sensitivity MHz/V Typ	Power output dBm Typ	Harmonic dBc Typ	Frequency drift MHz Typ	Phase noise @10/100KHz dBc/Hz Typ	Input capacitance pF Typ	Power supply V/mA Max	Pack-age
MCRO422	417-427	0.5-4.5	4	6	-10	2	-116/-136	100	5/20	SM-2
MCRO585	545-605	0-10	8	10	-10	2	-120/-140	100	12/30	SM-2
MCRO646	641-651	0.5-4.5	4	6	-10	2	-122/-142	100	5/20	SM-2
MCRO698	681-716	0.5-9	5	7	-10	2	-118/-138	100	8/25	SM-2
MCRO720	720	0.5-4.5	2.4	9	-10	2	-126/-146	100	5/30	SM-2
MCRO845	845	0.5-4.5	2	9	-10	2	-122/-142	100	8/30	SM-2
MCRO896	891-901	0.5-4.5	4	6	-10	2	-122/-142	100	5/20	SM-1B
MCRO930	925-935	0.5-4.5	4	6	-10	2	-120/-140	100	5/25	SM-1B
MCRO976	971-981	0.5-4.5	4	10	-10	2	-120/-140	100	5/25	SM-1B
MCRO1024	1019-1029	0.5-4.5	4	6	-10	2	-123/-143	100	5/25	SM-1B
MCRO1030	1030	0.5-4.5	2	6	-10	2	-126/-146	100	5/30	SM-2
MCRO1089	1059-1119	0.5-12	7	6	-10	3	-113/-133	100	5/25	SM-1B
MCRO1135	1130-1140	0.5-4.5	4	8	-10	2	-125/-145	100	5/30	SM-1B
MCRO1144	1109-1179	0.5-12	8	6	-10	3	-110/-130	100	5/25	SM-1B
MCRO1207	1169-1245	0.5-12	8	6	-10	3	-110/-130	100	5/25	SM-1B
MCRO1263	1243-1283	0.5-4.5	12	7	-10	3	-115/-135	100	5/30	SM-1B
MCRO1280	1240-1320	0.5-12	8	6	-10	3	-110/-130	100	5/30	SM-1B
MCRO1340	1335-1345	0.5-4.5	4	6	-10	2	-123/-143	100	5/30	SM-1B
MCRO1391	1381-1401	0.5-4.5	8	5	-10	2	-117/-137	100	5/30	SM-1B
MCRO1400	1395-1405	0.5-4.5	4	6	-10	2	-122/-142	100	5/30	SM-1B
MCRO1475	1470-1480	0.5-4.5	7	4	-10	2	-121/-141	100	5/30	SM-2
MCRO1490	1485-1495	0.5-4.5	4	6	-10	2	-120/-140	100	5/30	SM-1B
MCRO1539.5	1519-1559	0-8	12	3	-10	2	-115/-135	100	5/30	SM-1B
MCRO1549	1539-1559	0.5-4.5	8	5	-10	2	-116/-136	100	5/30	SM-1B
MCRO1600	1590-1610	0-5	6	10	-10	2	-115/-135	100	8/36	SM-1B
MCRO1606.4	1596-1616	0.5-4.5	10	4	-10	2	-117/-137	100	8/30	SM-1B
MCRO1731	1691-1771	0.4-5.4	20	4	-10	6	-109/-129	100	5/30	SM-1B
MCRO1790	1780-1800	0.5-4.5	6	6	-10	3	-118/-138	100	5/30	SM-1B
MCRO1800	1790-1810	0.5-4.5	8	5	-15	3	-117/-137	56	5/30	SM-1B
MCRO1820	1810-1830	0.5-4.5	12	7	-15	3	-117/-137	56	8/30	SM-1B
MCRO1858	1858	0.5-4.5	4	5	-15	3	-115/-135	56	8/30	SM-1B
MCRO1878	1866-1890	0.5-4.5	12	2	-15	3	-115/-135	56	5/20	SM-1B
MCRO1900	1890-1910	0.5-4.5	8	6	-15	3	-119/-139	56	8/30	SM-1B
MCRO1950	1940-1960	0.5-4.5	10	8	-15	4	-117/-137	56	8/30	SM-1B
MCRO2000	1990-2010	0.5-4.5	6	5	-15	4	-118/-138	56	5/30	SM-1B
MCRO2040	2030-2050	0.5-4.5	8	6	-15	4	-118/-138	56	5/30	SM-1B
MCRO2043.5	2004-2083	0.4-5.4	20	4	-15	6	-109/-129	56	5/30	SM-1B

## MCRO series Voltage Controlled Oscillator with ceramic coaxial resonator



(Continued)

Part number	Frequency MHz	Tuning Voltage V	Tuning sensitivity MHz/V Typ	Power output dBm Typ	Harmonic dBc Typ	Frequency drift MHz Typ	Phase noise @10/100KHz dBc/Hz Typ	Input capacitance pF Typ	Power supply V/mA Max	Package
MCRO2048	2048	0.5-4.5	5	5	-15	4	-120/-140	56	5/30	SM-1B
MCRO2057	2047-2067	0.5-4.5	12	3	-15	4	-116/-136	56	5/30	SM-1B
MCRO2563W	2375-2715	1-14	25-35	6±2	-15	8	-105/-125	56	5/30	SM-1B
MCRO2065	2025-2105	0.4-5.4	20	4	-15	6	-109/-129	56	5/30	SM-1B
MCRO2105	2095-2115	0.5-4.5	10	6	-15	4	-117/-137	56	8/33	SM-1B
MCRO2130	2120-2140	0.5-4.5	10	7	-15	4	-116/-136	56	8/28	SM-1B
MCRO2133	2133	0.5-4.5	7	3	-15	4	-117/-137	56	5/30	SM-1B
MCRO2160	2140-2171	0.5-4.5	13	7	-15	4	-116/-136	56	5/30	SM-1B
MCRO2185	2171-2199	0.5-4.5	11	3	-15	4	-117/-137	56	5/30	SM-1B
MCRO2200	2200	0.5-4.5	7	3	-15	4	-122/-142	56	5/30	SM-2
MCRO2207	2167-2247	0.4-5.4	20	4	-15	6	-109/-129	56	5/30	SM-1B
MCRO2225	2215-2235	0.5-4.5	9	2	-15	4	-118/-138	56	5/30	SM-1B
MCRO2250	2235-2265	0.5-4.5	15	4	-15	4	-115/-135	56	5/30	SM-1B
MCRO2278	2265-2291	0.5-4.5	12	5	-15	4	-117/-137	56	8/30	SM-1B
MCRO2300	2290-2310	0.5-4.5	10	5	-15	5	-116/-136	56	5/30	SM-1B
MCRO2350	2340-2360	0.5-4.5	10	5	-15	5	-117/-137	56	5/30	SM-1B
MCRO2370	2360-2380	0.5-4.5	10	6	-15	5	-115/-135	56	5/30	SM-1B
MCRO2387	2377-2397	0.5-4.5	10	6	-15	5	-115/-135	56	5/30	SM-1B
MCRO2404	2371-2437	0.4-5.4	20	4	-15	8	-109/-129	56	5/30	SM-1B
MCRO2425	2400-2450	0.5-4.5	20	6	-15	8	-115/-135	56	5/30	SM-1B
MCRO2500	2480-2520	0.5-4.5	20	6	-15	8	-115/-135	56	5/30	SM-1B
MCRO2550	2530-2570	0.5-4.5	20	5	-15	8	-114/-134	56	5/30	SM-1B
MCRO2560	2540-2580	0.5-4.5	20	5	-15	8	-114/-134	56	8/28	SM-1B
MCRO2575	2555-2595	0.5-4.5	19	3	-15	8	-113/-133	56	5/30	SM-1B
MCRO2600	2590-2610	0.5-4.5	6	5	-15	5	-114/-134	56	5/30	SM-1B
MCRO2630	2630	0.5-4.5	5	5	-15	5	-119/-139	56	5/30	SM-1B
MCRO2640	2620-2660	0.5-4.5	20	5.4	-15	8	-113/-133	56	5/30	SM-1B
MCRO2677	2657-2697	0.5-4.5	20	6	-15	8	-113/-133	56	8/30	SM-1B
MCRO2680	2680	0.5-4.5	7	7	-15	6	-115/-135	56	5/30	SM-1B
MCRO2700	2690-2710	0.5-4.5	12	8	-15	6	-114/-134	56	8/30	SM-1B
MCRO2720	2705-2735	0.5-4.5	18	6	-15	6	-113/-133	56	5/30	SM-1B
MCRO2735	2730-2740	0.5-4.5	5	6	-15	5	-117/-137	56	5/30	SM-1B
MCRO2750	2730-2770	0.5-4.5	15	6	-15	8	-112/-132	56	5/30	SM-1B
MCRO2750W	2500-3000	0-15	25-45	5±2	-15	8	-100/-120	56	5/30	SM-1B
MCRO2780	2760-2800	0.5-4.5	15	6	-15	8	-112/-132	56	5/30	SM-1B
MCRO2800	2795-2805	0-5	5	9	-15	5	-119/-139	56	8/28	SM-1B
MCRO2825	2810-2840	0.5-4.5	13	5	-15	6	-115/-135	56	5/30	SM-1B
MCRO2850	2845-2855	0.5-4.5	6	5	-15	5	-117/-137	56	5/25	SM-1B
MCRO2880	2860-2900	0.5-4.5	23	5	-15	8	-111/-131	56	9/30	SM-1B
MCRO2900	2900	0.5-4.5	7	5	-15	5	-116/-136	56	5/30	SM-1B
MCRO2920	2900-2940	0.5-4.5	24	4	-15	8	-112/-132	56	9/30	SM-1B
MCRO2973	2968-2978	0.5-4.5	5	4	-15	6	-119/-139	56	5/30	SM-1B
MCRO2990	2962-3018	0.5-4.5	27	6	-15	8	-110/-130	56	9/30	SM-1B

## MCRO series Voltage Controlled Oscillator with ceramic coaxial resonator



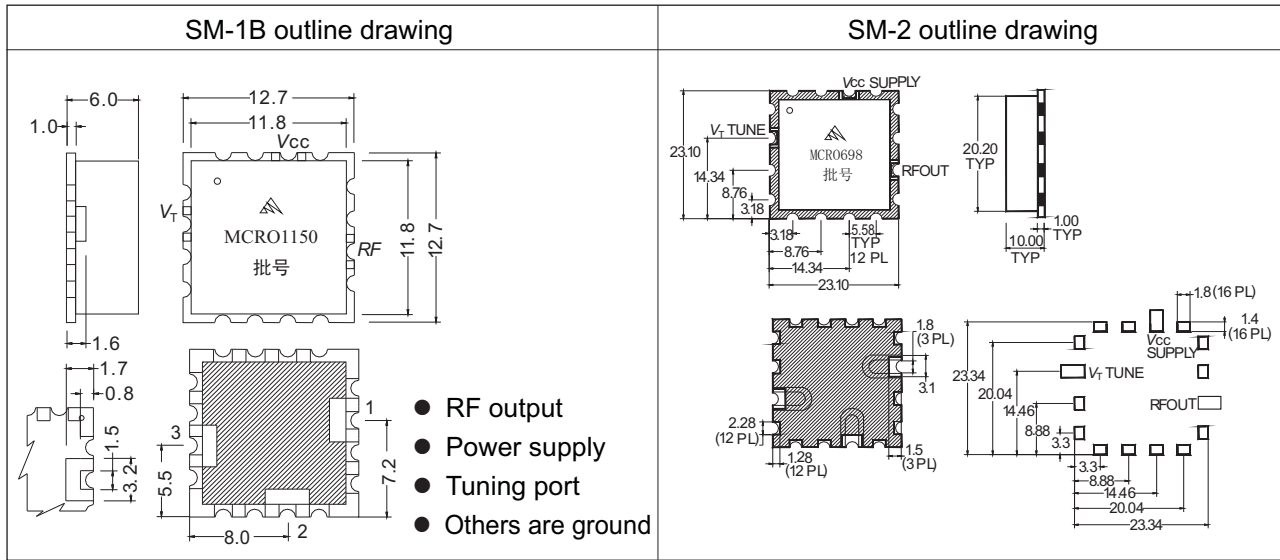
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Part number	Frequency MHz	Tuning Voltage V	Tuning sensitivity MHz/V Typ	Power output dBm Typ	Harmonic dBc Typ	Frequency drift MHz Typ	Phase noise @10/100KHz dBc/Hz Typ	Input capacitance pF Typ	Power supply V/mA Max	Pack-age
MCRO3000	2995-3005	0.5-4.5	5	6	-15	6	-115/-135	56	5/30	SM-1B
MCRO3046	3018-3074	0.5-4.5	29	5	-15	8	-111/-131	56	9/30	SM-1B
MCRO3052.5	3052.5	0.5-4.5	8	6	-15	6	-116/-136	56	5/30	SM-1B
MCRO3100	3070-3130	0-12	9	6	-15	6	-112/-132	56	5/30	SM-1B
MCRO3100W	2900-3300	0-15	20-40	5±2	-15	10	-102/-132	56	5/30	SM-1B
MCRO3135	3100-3170	0.5-4.5	26	8	-15	8	-109/-129	56	9/30	SM-1B
MCRO3150	3145-3155	0.5-4.5	8	6	-15	6	-113/-133	56	5/30	SM-1B
MCRO3175	3165-3185	0.5-4.5	8	6	-15	6	-114/-134	56	5/30	SM-1B
MCRO3200	3190-3210	0.5-4.5	10	8	-15	6	-114/-134	56	5/30	SM-1B
MCRO3228	3200-3255	0.5-4.5	20	9	-15	9	-112/-132	56	9/30	SM-1B
MCRO3250	3240-3260	0.5-4.5	13	8	-15	6	-112/-132	56	5/30	SM-1B
MCRO3300	3295-3305	0.5-4.5	9	6	-15	6	-111/-131	56	5/30	SM-1B
MCRO3317	3293-3340	0.5-4.5	16	5	-15	8	-112/-132	56	5/30	SM-1B
MCRO3330	3320-3340	0.5-4.5	8	6	-15	6	-110/-130	56	5/30	SM-1B
MCRO3340	3330-3350	0.5-4.5	16	9	-15	7	-112/-132	56	5/30	SM-1B
MCRO3350	3340-3360	0.5-4.5	16	8	-15	7	-111/-131	56	5/30	SM-1B
MCRO3370	3355-3385	0.5-4.5	17	7	-15	7	-112/-132	56	5/30	SM-1B
MCRO3420	3410-3430	0.5-4.5	8	10	-15	8	-108/-128	56	8/30	SM-1B
MCRO3480	3470-3490	0.5-4.5	10	7	-15	5	-112/-132	56	5/26	SM-1B
MCRO3500	3500	0-8	5	9	-20	6	-113/-133	56	8/30	SM-1B
MCRO3570	3560-3580	0.5-4.5	10	6	-20	8	-108/-128	56	5/30	SM-1B
MCRO3600	3590-3610	0.5-4.5	10	4	-20	8	-106/-126	56	5/30	SM-1B
MCRO3620	3610-3630	0.5-4.5	8	7	-20	6	-110/-130	56	5/28	SM-1B
MCRO3670	3665-3775	0.5-4.5	5	6	-20	6	-113/-133	56	8/30	SM-1B
MCRO3760	3750-3770	0.5-4.5	8	7	-20	6	-110/-130	56	5/28	SM-1B
MCRO3800	3790-3810	0.5-4.5	8	7	-20	6	-108/-128	56	5/30	SM-1B
MCRO3862.5	3862.5	0.5-4.5	5	7	-20	6	-108/-128	56	5/30	SM-1B
MCRO3890	3880-3900	0.5-4.5	8	7	-20	6	-106/-126	56	5/30	SM-1B
MCRO3898	3888-3908	0.5-4.5	10	6	-20	8	-106/-126	56	5/30	SM-1B
MCRO3900	3890-3910	0.5-4.5	12	7	-20	8	-107/-127	56	5/30	SM-1B
MCRO4000	3995-4005	0.5-4.5	6	4	-20	8	-108/-128	56	5/30	SM-1B
MCRO4050	4045-4055	0.5-4.5	6	4	-20	8	-107/-127	56	5/25	SM-1B
MCRO4100	4100	0-5	8	6	-20	10	-105/-125	56	12/30	SM-1B
MCRO4220	4220	0.5-4.5	8	5	-20	10	-108/-128	56	5/30	SM-1B
MCRO4300	4290-4310	0.5-4.5	10	5	-20	14	-102/-122	56	5/25	SM-1B
MCRO4350	4340-4360	0.5-4.5	10	5	-20	14	-102/-122	56	5/25	SM-1B
MCRO4400	4400	0.5-4.5	4	5	-20	8	-108/-128	56	5/30	SM-1B
MCRO4700	4695-4705	0.5-4.5	5	6	-20	10	-105/-125	56	5/25	SM-1B
MCRO4800	4780-4820	0-12	8	2	-20	14	-102/-122	56	5/30	SM-1B
MCRO5000	5000	0.5-4.5	9	2	-20	16	-103/-123	56	5/30	SM-1B
MCRO5120	5120	0.5-4.5	10	5	-20	18	-100/-120	56	5/30	SM-1B

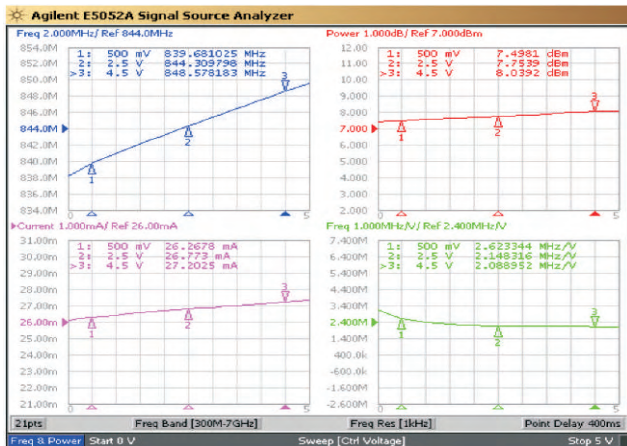
# MCRO series Voltage Controlled Oscillator with ceramic coaxial resonator



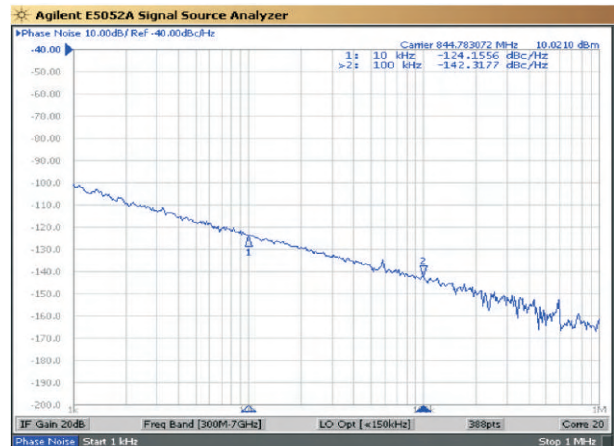
## Outline Drawing



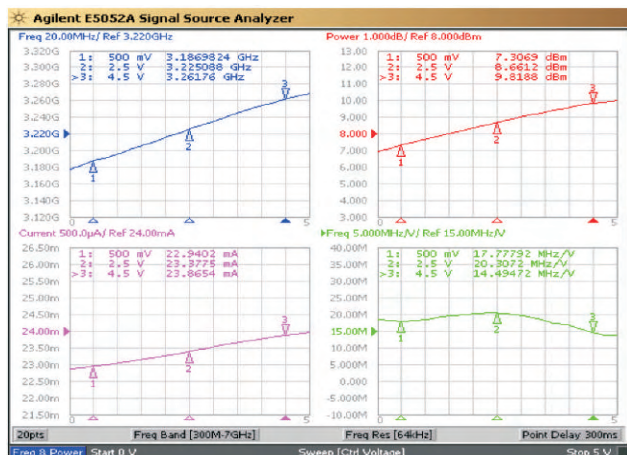
## Typical performance (Tested by E5052A of Agilent)



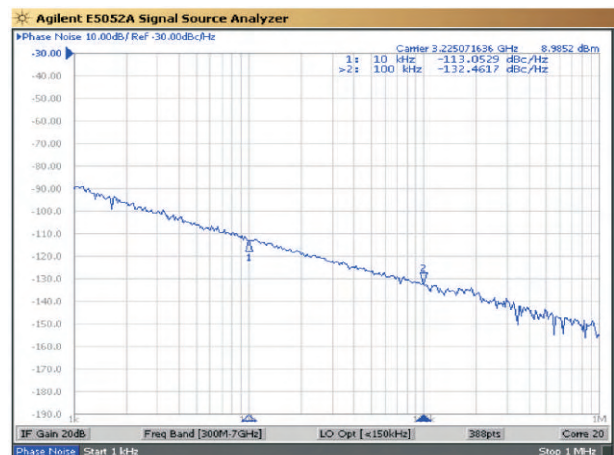
Frequency/power, tuning sensitivity, current of MCRO845



Phase noise of MCRO845



Frequency/power, tuning sensitivity, current of MCRO3228



Phase noise of MCRO3228