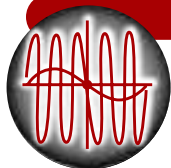
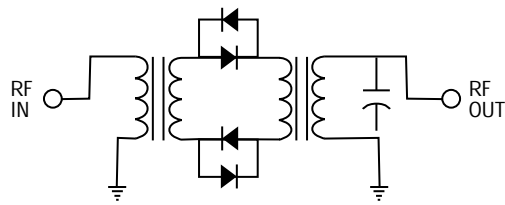
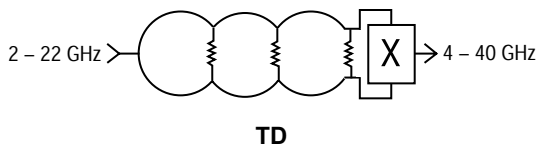


**SECTION FOUR**

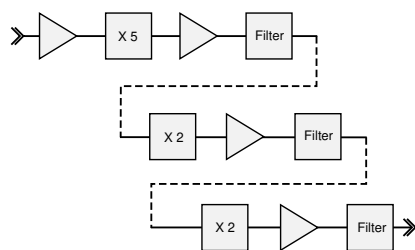
**FREQUENCY MULTIPLIERS AND ACTIVE SUBSYSTEMS**



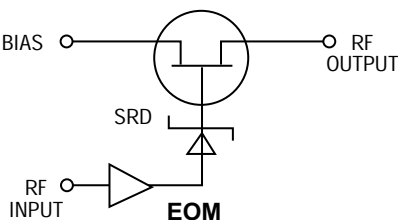
**(N)FREQ**



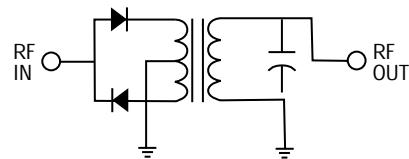
**FOM  
(Odd Harmonic)**



**SYS (X20)  
SUBSYSTEM**



**EOM**



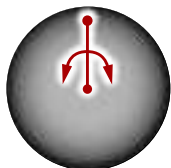
**FEM (Even Harmonic)**

MODEL NUMBER	RF IN (GHz)	RF OUT (GHz)	PWR IN (dBm)	PWR OUT (dBm)	ADJACENT SIDEBAND REJ. (dBc, Min.)	SPURIOUS REJ. IN/OCTAVE BIO (dB, Max.) / (dBm)	IN/OUT VSWR (Typ.)	PAGE
<b>ANALOG INPUTS</b>								
FEM1.5	0.25 – 1.0	1.4 – 1.6	+10	-3	-20	—	2.5:1	99
FEM3.0	0.50 – 2.0	2.8 – 3.2	+10	-3	-20	—	2.5:1	99
FOMR7	.12 – .25	.72 – .80	+16	-19	-10	-10	2.7:1	101
SYS03X20	.14 – .16	2.8 – 3.1	+10	-3	-50	-50	2.0:1	103
EOM0218HW4	.5 – 3.5	2 – 26	+18	-23	0	0	2.0:1	105
EOM0226HW2	.5 – 1.5	2 – 18	+10	-17	0	0	2.0:1	107
TD0040LA2	2 – 2.0	4 – 40	+10	-3	N/A	N/A	3.0:1	109

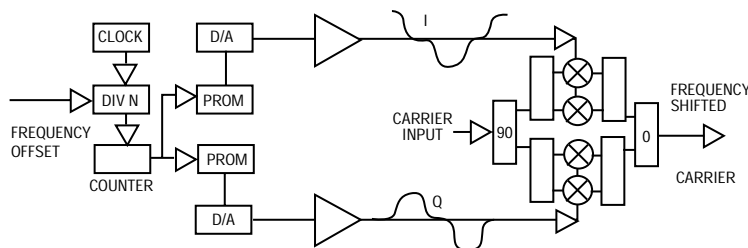
Notes: Units with "L" diodes accept +10 to +13 dBm RF input.  
Units with "H" diodes accept +16 to +19 dBm RF input.

**SECTION FIVE**

**FREQUENCY SHIFTERS (DOPPLER SIMULATION VIA DIRECT DIGITAL SYNTHESIS)**



**FOG**



**MODEL: SMC0618DDS**

MODEL NUMBER	RF IN (GHz)	PWR IN (dBm)	DIGITAL INPUT (SER. / PARR # BITS)	FREQUENCY SHIFT (kHz)	FREQUENCY RESOLUTION (Hz)	RF OUT (dBm, Min.)	ADJACENT SIDEBAND REJECTION (dBc, Min.)	SPURIOUS REJ. IN RF, BW (dBc)	PAGE
<b>DIGITALLY CONTROLLED INPUTS</b>									
SMC0502DDS	0.5 – 2.0	+10	P, 12 (1)	20	10	-4	25	25	113
SMC0206DDS	2 – 6.0	+15	P, 14 (2)	50	25	0	20	20	115
SMC0506DDS	5.4 – 5.9	+10	P, 14 (2)	10	15	-5	25	25	117
SMC0910DDS	9.0 – 9.25	+10	P, 14 (2)	10	15	-5	25	25	119
SMC0618DDS	6.0 – 18	+20	P, 14 (2)	50	25	+5	20	20	121

Notes: 1. Frequency offset determined by 12 bit DIP switch, external trim pot can be used to null-carrier feedthrough.  
2. Frequency offset and on/off controlled by 14 bit serial (1 Mbps).