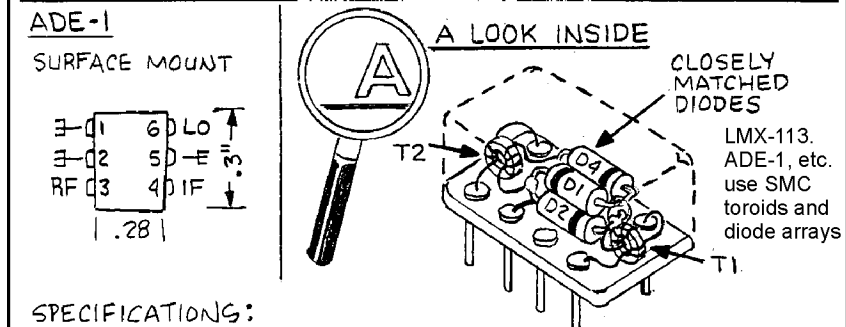
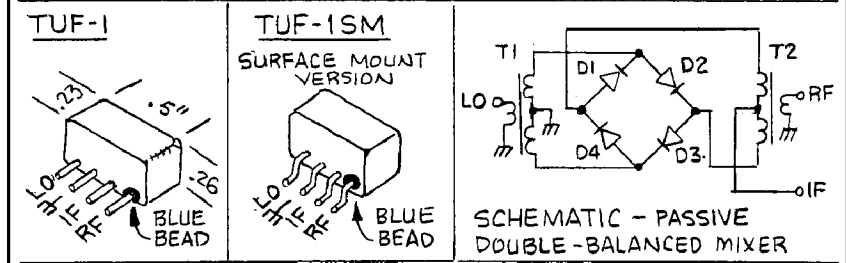
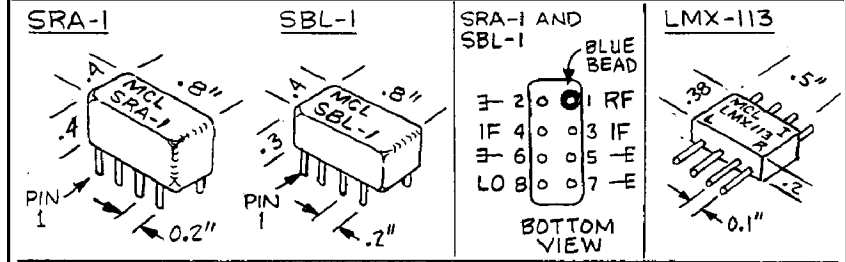


THE HANDIMAN'S GUIDE TO DBM MIXERS

by Paul Harden, NA5N

Jim, K8IQY, used surplus "flat-pack" style LMX-113 passive mixers, popular in the 1980-90's, and ideal for "Manhattan Style" construction. However, virtually any LEVEL 3 or 7 (LO drive = +3 or +7dBm) passive double-balanced mixers (DBM's) can be used as well, with some common types shown below:



SPECIFICATIONS:

	SRA-1	SBL-1	TUF-1	ADE-1	LMX-113
RF IN MHz	5-500	1-500	2-600	0.5-500	5-1000
LO IN MHz	5-500	1-500	2-600	0.5-500	5-1000
IF MHz	DC-500	DC-500	DC-600	DC-500	DC-1000
IP3 *	+12dBm	+15dBm	+15dBm	+16 dBm	+16 dBm
CONV. LOSS *	6.5 dB	5.7 dB	6.2 dB	5.0 dB	5.6 dB
ISOLATION *					
LO-RF PORT	67 dB	62 dB	64 dB	67 dB	67 dB
LO-IF PORT	59 dB	62 dB	58 dB	57 dB	62 dB

* Parameters measured at 20MHz ALL TYPES: LO drive = +7dBm (1.4Vpp)
 IP3 = 3rd Order Intercept Point Compression point = +1dBm (RF Port)
 Conv. Loss = Conversion Loss