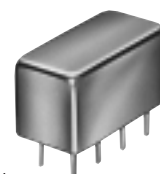


FREQUENCY MIXERS

Plug-In

ACTIVE, LOAD INSENSITIVE 10 to 500 MHz



UNCL-X1MH

UNCL-X1MH (+13 dBm LO, up to +7 dBm RF)

MODEL NO.	FREQUENCY MHz		CONVERSION GAIN, dB				LO-RF ISOLATION, dB					LO-IF ISOLATION, dB					INPUT POWER (dBm) 1 dB Comp Typ.	DC POWER		CASE STYLE Note B	CONNECTION	PRICE \$ Qty. (1-9)		
	LO/RF f _L -f _U	IF	Mid-Band		Total Range	L			M			U			Current (mA)									
			m σ	Min.		Typ. Min.	Typ. Min.	Typ. Min.	Typ. Min.	Typ. Min.	Typ. Min.	Typ. Min.	Typ. Min.	Volt										
UNCL-X1MH	1-500	10-500	2.41	.015	0.5	0	60	40	35	25	30	20	50	30	25	18	18	14	7	12	60	A01	a	29.95

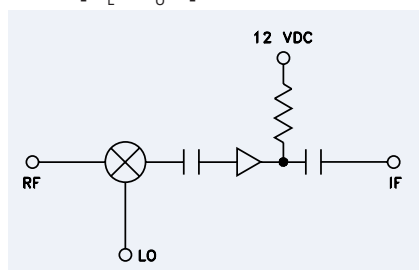
L = low range [f_L to $10 f_L$]

M = mid range [$10 f_L$ to $f_U/2$]
m = mid band [$2f_L$ to $f_U/2$]

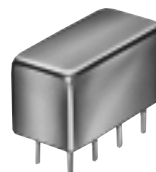
U = upper range [$f_U/2$ to f_U]

features

- 2-tone 3rd-order IM
- insensitive to IF load
- VSWR 1.2:1, IF/RF ports



ACTIVE, Low NOISE (4.3 dB typ.) 10 to 500 MHz



UNCL-R1

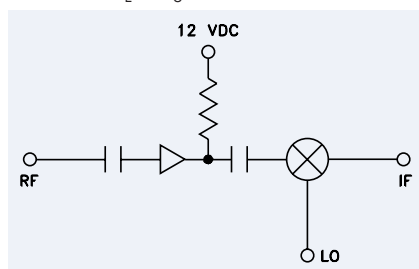
UNCL-R1 (+7 dBm LO, up to -10 dBm RF)

MODEL NO.	FREQUENCY MHz		CONVERSION GAIN, dB					LO-RF ISOLATION, dB					LO-IF ISOLATION, dB					INPUT POWER (dBm) 1 dB Comp Typ.	DC POWER		CASE STYLE Note B	CONNECTION	PRICE \$ Qty. (1-9)		
	LO/RF f_L - f_U	IF	Mid-Band			Total		L		M		U		L		M			U						
			$\bar{x}$	σ	Min.	Range	Min.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.		Min.	Typ.				Volt	Current (mA)
UNCL-R1	10-500	DC-500	5.53	.11	2	5	2	65	45	55	40	47	35	40	30	30	20	25	17	-10	12	35	A01	b	25.95

L = low range [f_L to $10 f_L$]

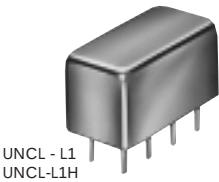
M = mid range [$10 f_L$ to $f_U/2$]
m = mid band [$2f_L$ to $f_U/2$]

U = upper range [$f_U/2$ to f_U]



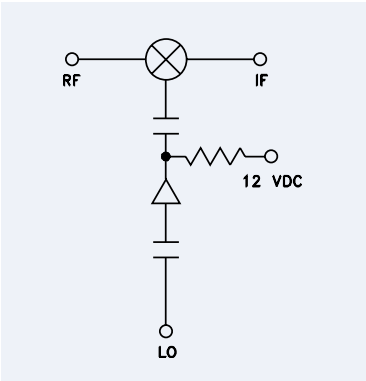
ACTIVE, Low LO DRIVE 10 to 500 MHz

UNCL-L1 (-4 dBm LO, up to 1 dBm RF)
UNCL-L1H (+6 dBm LO, up to 14 dBm RF)



MODEL NO.	FREQUENCY MHz		CONVERSION LOSS, dB				LO-RF ISOLATION, dB						LO-IF ISOLATION, dB						INPUT POWER (dBm) 1 dB Comp Typ.	DC POWER		CASE STYLE Note B	CONNECTION	PRICE \$ Qty. (1-9)
	LO/RF f _L -f _U	IF	Mid-Band		Total Range	L		M		U		L		M		U								
			σ	Max.		Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.									
																Max.								
UNCL-L1	10-500	DC-500	5.73	.08	8.0	8.5	45	30	35	20	25	17	32	20	23	15	18	12	1	12	35	A01	c	25.95
UNCL-L1H	10-500	DC-500	5.73	.07	8.0	8.5	45	25	36	20	24	17	32	18	25	15	18	10	14	12	60	A01	c	29.95

L = low range [f_L to $10 f_L$] M = mid range [$10 f_L$ to $f_U/2$] U = upper range [$f_U/2$ to f_U]
m = mid band [$2f_L$ to $f_U/2$]



NSN GUIDE	
MCL NO.	NSN
UNCL-X1MH	5895-01-391-0040

- NOTES:
- $\bar{x}$ Average of conversion loss at center of mid-band frequency($f_L + f_U/4$)
 - σ Standard deviation
 - A. General Quality Control Procedures, Environmental Specifications, Hi-Rel and MIL description are given in section 0, see "Mini-Circuits Guarantees Quality" article.
 - B. Connector types and case mounted options, case finishes are given in section 0, see "Case Styles & Outline Drawings".
 - C. Prices and Specifications subject to change without notice.

pin connections			
PORT	a	b	c
LO	7	7	1
RF	8	1	7
IF	1	8	8
DC	4	4	4
GND EXT.	3,5,6	3,5,6	3,5,6
CASE GND	3,5,6	3,5,6	3,5,6
NOT USED	2	2	2