

FREQUENCY MIXERS

Plug-In

LEVEL 10 50 kHz to 8 GHz



TFM / TUF



ROK



SBL / SRA

+10 dBm LO, up to +5 dBm RF

MODEL NO.	FREQUENCY MHz		CONVERSION LOSS dB				LO-RF ISOLATION, dB						LO-IF ISOLATION, dB						CASE STYLE	CONNECTOR	PRICE \$	
	LO/RF f_L - f_U	IF	Mid-Band m			Total Range Max.	L		M		U		L		M		U					Note B
			\bar{x}	σ	Max.		Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.				
TFM-15	10-3000	10-800	6.75	.08	8.0	8.5	35	25	35	25	35	25	30	20	30	20	30	20	B13	aa	51.95	
TFM-150**	10-2000	DC-1000	6.19	.11	8.0	8.0	32	25	35	25	35	25	33	20	30	20	30	20	B13	aa	47.45	
<input type="checkbox"/> TUF-1LH	2-600	DC-600	6.0	.17	7.0	8.0	70	50	50	30	42	25	65	45	50	30	41	22	B02	z	7.25	
<input type="checkbox"/> TUF-2LH*	50-1000	DC-1000	5.2	.30	7.0	8.5	58	40	44	30	39	25	60	35	50	25	38	20	B02	z	8.20	
<input type="checkbox"/> TUF-3LH	0.15-400	DC-400	4.8	.37	7.0	8.0	67	50	51	30	40	25	67	40	45	25	34	20	B02	z	9.10	
<input type="checkbox"/> TUF-5LH	20-1500	DC-1000	6.9	.27	8.5	9.0	53	40	42	30	38	25	40	25	30	18	22	8	B02	z	12.45	
<input type="checkbox"/> TUF-11ALH	1400-1900	40-500	7.0	.20	8.6	8.6	36 (Typ.) 20 (Min.)			28 (Typ.) 15 (Min.)			27 (Typ.) 18 (Min.)			B02	z	19.95				
<input type="checkbox"/> TUF-860LH	800-1050	DC-250	6.3	.27	7.9	7.9	35 (Typ.) 25 (Min.)			27 (Typ.) 18 (Min.)			27 (Typ.) 18 (Min.)			B02	z	12.45				
ROK-2500LH	1-2500	DC-500	6.4	.20	8.4	9.0	55	40	48	20	30	20	55	38	27	15	22	15	PP230	ah	34.95	
<input type="checkbox"/> SBL-1LH	2-500	DC-500	5.8	.03	7.0	8.0	75	45	68	35	56	25	61	35	45	25	36	20	A06	d	6.75	
<input type="checkbox"/> SBL-1-1LH	.2-400	DC-400	5.2	.06	7.0	9.0	67	45	64	30	51	25	62	30	52	25	34	20	A06	d	9.45	
<input type="checkbox"/> SBL-1XLH	10-1000	5-500	6.0	.12	7.5	8.5	50	40	40	25	30	20	70	45	55	40	45	30	A06	j	8.45	
<input type="checkbox"/> SBL-2LH	5-1000	DC-1000	5.9	.09	7.5	9.5	67	45	61	30	57	30	68	40	54	30	43	20	A06	h	9.45	
<input type="checkbox"/> SBL-11LH	5-2000	10-600	7.0	.11	8.5	9.5	60	45	45	30	30	20	50	35	30	20	25	16	A06	m	22.95	
SRA-2CR	10-1000	5-500	5.68	.12	7.5	8.0	50	40	40	30	30	20	40	25	30	18	25	15	A01	s	19.95	
SRA-215	.05-1500	.05-500	5.20	.08	7.5	9.0	25	20	35	25	30	20	25	20	35	25	25	15	A01	m	30.95	
SRA-220	.05-2000	.05-500	5.59	.11	8.0	9.0	25	20	40	30	30	20	25	20	40	30	25	15	A01	m	33.95	

L = low range (f_L to $10 f_L$)

M = mid range ($10 f_L$ to $f_U/2$)
m = mid band ($2 f_L$ to $f_U/2$)

U = upper range ($f_U/2$ to f_U)

NOTES:

- \bar{x} Average of conversion loss at center of mid-band frequency ($f_L + f_U/4$)
- σ Standard deviation
- Non-hermetic
- * L=50-100 MHz; M=100-500 MHz
- ** Below 10 MHz IF, conversion loss increase up to 6 dB higher as frequency decreases to DC.
- A. General Quality Control Procedures, Environmental Specifications, Hi-Rel and MIL description are given in General Information (Section 0).
- 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.
 1. Absolute maximum power, voltage and current ratings:
 - 1a. RF power 50mW;
 - 1b. Peak IF current, 40mA

NSN GUIDE

MCL NO.	NSN
TFM-15	5895-01-292-2759
ZFM-15	5895-01-412-3035
ZFM-150	5895-01-217-6878



INTERNET <http://www.minicircuits.com>

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661

Distribution Centers NORTH AMERICA 800-654-7949 • 417 335-5935 • Fax 417-335-5945 • EUROPE 44-1252-832600 • Fax 44-1252-837010

ISO 9001 CERTIFIED