

FREQUENCY MIXERS

Surface Mount

LEVEL 7 150 kHz to 4.3 GHz



+7 dBm LO, up to +1 dBm RF

MODEL NO.	FREQUENCY MHz		CONVERSION LOSS dB				LO-RF ISOLATION, dB			LO-IF ISOLATION, dB			CAPD DATA	CASE STYLE	Orientation	Price \$
	LO/RF f_L-f_U	IF	\bar{x}	σ	Max.	Total Range Max.	L Typ.	M Typ.	U Typ.	L Typ.	M Typ.	U Typ.				
◆ ALY-3	2300-2600	DC-400	5.5	.15	—	7.0	31 (typ.)	25 (min.)		15 (typ.)	12 (min.)			CB539	jx	5.95
◆ ALY-4	3300-4300	DC-600	5.7	.15	—	8.0	28 (typ.)	23 (min.)		15 (typ.)	12 (min.)			CB539	jx	5.95
ASK-1-KK81	1-600	DC-600	5.58	.06	7.0	8.5	50 30 35 25 30 20			45 35 30 20 25 15			KK81	w	6.95	
† ASK-2-KK81	1-1000	DC-1000	6.79	.10	8.0	9.8	60 40 35 18 26 16			50 30 25 17 15 10			KK81	w	8.25	
JMS-1	2-500	DC-500	5.75	.10	7.0	8.0	55 50 45 30 40 25			55 45 45 25 32 20			BH292	ht	4.95	
JMS-2	20-1000	DC-1000	7.0	.15	8.4	9.5	63 40 50 28 35 20			56 30 47 22 37 20			BH292	ht	7.45	
JMS-2W	5-1200	DC-500	6.8	.10	8.0	9.0	60 40 60 30 37 20			60 40 48 20 31 15			BH292	ht	7.95	
JMS-5	5-1500	DC-1000	6.0	.10	8.0	9.5	63 40 50 25 35 20			60 40 30 18 15 8			BH292	ht	9.95	
JMS-11X	5-1900	5-1000	6.7	.15	8.2	9.8	58 45 35 20 27 18			56 45 37 20 27 20			BH292	hu	4.25***	
◆ LRMS-1J	0.5-500	DC-500	5.94	.05	7.0	8.5	55 50 33 25 27 20			55 45 30 23 24 19			QQQ569	w	6.25	
◆ LRMS-1WJ	2-750	DC-750	5.83	.21	7.5	8.5	70 45 45 28 38 22			60 45 40 25 30 20			QQQ569	w	6.75	
◆ LRMS-2J	5-1000	DC-1000	6.67	.26	8.0	9.5	60 40 40 20 25 18			55 30 30 20 20 12			QQQ569	w	6.95	
◆ LRMS-2DJ	5-1000	DC-1000	6.81	.06	8.0	10.0	59 40 40 30 33 22			55 30 40 22 30 20			QQQ569	w	7.25	
◆ LRMS-2UJ	10-1000	10-750	6.79	.16	8.0	9.5	55 40 40 30 30 25			55 30 35 25 30 22			QQQ569	w	11.45	
◆ LRMS-5J	5-1500	DC-1000	5.92	.34	7.5	9.5	60 40 40 20 30 18			55 30 30 18 15 8			QQQ569	w	13.95	
◆ LRMS-11AJ	1500-1900	40-400	7.44	.36	—	9.0	25 (typ.) 17 (min.)			23 (typ.) 15 (min.)			QQQ569	w	16.95	
◆ LRMS-860J	800-1050	DC-250	5.5	.23	7.5	7.5	36 (typ.) 25 (min.)			24 (typ.) 18 (min.)			QQQ569	w	11.45	
◆ LRMS-30J	200-3000	DC-1000	6.8	.30	9.0	9.8	30 (typ.) 17 (min.)			27 (typ.) 7 (min.)			QQQ569	w	7.95***	
RMS-1	0.5-500	DC-500	5.94	.05	7.0	8.5	55 50 33 25 27 20			55 45 30 23 24 19			TT240	w	6.25	
RMS-1W	2-750	DC-750	5.83	.21	7.5	8.5	70 45 45 28 38 22			60 45 40 25 30 20			TT240	w	6.75	
RMS-1BM	5-600	DC-600	6.0	.05	7.0	7.5	65 45 50 32 35 23			55 40 40 25 35 22			TT240	w	6.25	
RMS-2	5-1000	DC-1000	6.67	.26	8.0	9.5	60 40 40 20 25 18			55 30 30 20 20 12			TT240	w	6.95	
RMS-2D	5-1000	DC-1000	6.81	.06	8.0	10.0	59 40 40 30 33 22			55 30 40 22 30 20			TT240	w	7.25	
RMS-2U	10-1000	10-750	6.79	.16	8.0	9.5	55 40 40 30 30 25			55 30 35 25 30 22			TT240	w	11.45	
RMS-5	5-1500	DC-1000	5.92	.34	7.5	9.5	60 40 40 20 30 18			55 30 30 18 15 8			TT240	w	13.95	
RMS-11A	1500-1900	40-400	7.44	.36	—	9.0	25 (typ.) 17 (min.)			23 (typ.) 15 (min.)			TT240	w	16.95	
⊕ RMS-11F	350-2000	DC-400	5.5	.20	7.0	9.2	37 26 36 20 32 20			22 14 29 20 28 20			TT240	w	4.95***	
RMS-11X	5-1900	5-1000	7.1	.10	8.2	9.8	58 45 35 20 27 18			56 45 37 20 27 20			TT240	gk	3.95***	
RMS-30	200-3000	DC-1000	6.5	.20	9.0	9.8	27 (typ.) 17 (min.)			20 (typ.) 7 (min.)			TT240	w	6.95***	
RMS-860	800-1050	DC-250	5.5	.23	7.5	7.5	36 (typ.) 25 (min.)			24 (typ.) 18 (min.)			TT240	w	11.45	

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

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

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

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

NOTES:

- \bar{x} Average of conversion loss at center of mid-band frequency ($f_L+f_U/4$)
- σ Standard deviation
- ◆ Aqueous washable. For non-aqueous requirements, LRMS units available in case style QQQ130
- † Phase detection, positive polarity except RMS-860 and LRMS-860
- ⊕ Frequency ranges specified: m = 350-1000 MHz, L = 350-750 MHz, M = 750-1000 MHz, U = 1000-2000 MHz
- *** Price for quantities 10-49
- A. Environmental specifications and re-flow soldering information available in General Information Section.
- B. Units are non-hermetic unless otherwise noted. For details on case dimensions & finishes 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
RMS-1	5895-01-415-6798
RMS-2	5895-01-447-3489
RMS-2TR	5895-01-382-2092
SCM-1NL	5895-01-374-9561



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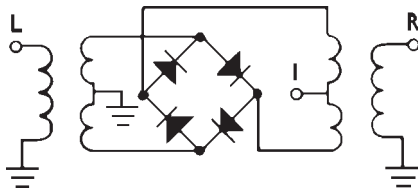
+7 dBm LO, up to +1 dBm RF

MODEL NO.	FREQUENCY MHz		CONVERSION LOSS dB				LO-RF ISOLATION, dB						LO-IF ISOLATION, dB						CAPD DATA	CASE STYLE	CONNECTION	Price \$ Qty. (1-9)
	LO/RF f_L - f_U	IF	Mid-Band			Total Range Max.	L	M		U		L	M		U		Note B					
			\bar{x}	σ	Max.			Typ.	Min.	Typ.	Min.		Typ.	Min.	Typ.	Min.						
SCM-1	1-500	DC-500	5.72	.10	7.0	8.0	60	40	45	35	40	30	50	40	45	35	40	25	FOR DATA SEE YONI ON OUR WEBSITE	YY101	d	4.25
SCM-2	5-1000	DC-500	5.76	.03	8.3	9.8	50	40	40	25	35	20	55	30	40	25	30	18		YY101	k	5.45
SCM-5	1250-1800	DC-500	5.82	.19	—	8.0	28 (typ.)		17 (min.)		18 (typ.)		8 (min.)				YY101	r		11.95		
SCM-2500	500-2500	DC-500	5.88	.08	6.9	10.0	35	22	35	22	35	22	18	12	18	12	18	12	YY101	r	11.95	
SKY-5G	2000-5000	DC-1000	6.6	.10	—	9.5	28 (typ.)		20 (min.)		13 (typ.)		7 (min.)					BJ398	je	14.95		
SKY-7G	2000-7000	DC-1000	7.0	.10	—	9.8	28 (typ.)		15 (min.)		20 (typ.)		7 (min.)					BJ398	je	16.95		
SKY-42	2000-4200	DC-1200	5.0	.30	—	8.5	31 (typ.)		20 (min.)		17 (typ.)		12 (min.)					BJ398	je	14.95		
SKY-53R	2800-5300	DC-500	5.7	.20	—	9.5	28 (typ.)		15 (min.)		12 (typ.)		8 (min.)					BJ398	hp	14.95		
SKY-60	2500-6000	DC-1500	6.2	.20	—	9.7	28 (typ.)		17 (min.)		14 (typ.)		8 (min.)					BJ398	je	14.95		
SYM-2	2-1000	DC-1000	5.4	.10	7.2	9.5	70	45	50	30	40	25	63	40	48	24	37	20	ON OUR WEBSITE	TTT166	x	11.95
SYM-860	800-1050	DC-250	5.6	.10	7.0	7.0	39 (typ.)		25 (min.)		37 (typ.)		20 (min.)					TTT166		x	8.95	
SYM-11	1-2500	10-600	7.0	.30	9.0	10.5	63	40	40	24	34	20	61	40	35	20	28	15		TTT167	x	9.95
◆ SYM-11J	1-2500	10-500	7.4	.10	8.0	9.8	64	40	43	24	35	20	60	40	35	20	30	15		CG581	ka	10.95
SYM-12	5-1200	DC-1000	6.5	.30	8.0	9.0	68	45	50	30	37	25	56	40	46	25	29	18	ON OUR WEBSITE	TTT167	x	9.45
SYM-2500	1-2500	DC-500	6.5	.10	8.5	9.8	70	50	50	25	36	20	60	45	30	10	16	8		TTT167	x	11.95
NEW SYM-42	1000-4200	DC-200	6.7	.20	—	10.2	35 (typ.)		20 (min.)		30 (typ.)		8 (min.)					TTT167		kv	15.95	
TUF-1SM	2-600	DC-600	5.85	.04	7.0	8.0	60	50	42	30	37	25	60	45	47	30	36	22	ON OUR WEBSITE	NNN150	z	4.25
TUF-2SM	50-1000	DC-1000	5.85	.07	7.5	9.0	58	40	47	30	42	25	50	35	44	20	29	18		NNN150	z	5.20
+ TUF-3SM	0.15-400	DC-400	4.7	.02	7.0	8.0	60	50	46	30	35	25	60	40	47	25	35	20		NNN150	z	6.10
TUF-5SM	20-1500	DC-1000	5.7	.04	9.0	9.0	54	40	42	30	39	25	40	25	32	18	23	8	ON OUR WEBSITE	NNN150	z	9.45
TUF-5XSM	1-1500	1-1000	5.9	.10	7.0	9.0	60	40	40	20	28	17	60	45	45	25	38	20		NNN150	gm	11.95
TUF-11ASM	1400-1900	40-500	6.8	.30	8.6	8.6	33 (typ.)		20 (min.)		29 (typ.)		15 (min.)					NNN150		z	16.95	
TUF-860SM	800-1050	DC-250	5.6	.24	7.75	7.75	35 (typ.)		25 (min.)		27 (typ.)		20 (min.)					NNN150	z	9.45		

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)



pin connections see case style outline drawings

PORT	d	k	r	w	x	z	gk	gm	hf ¹	hu ²	hp	je	jx	ka	kv
LO	8	8	1	1	2	4	1	4	6	6	5	1	5	11	1
RF	1	1	8	4	1	1	5	2	3	2	1	5	10	5	2
IF	3,4 [^]	3	3	5	3	2	4	1	2	3	7	7	8	2	3
GND EXT.	2,5,6,7	2,5,6,7	2,4,5,6,7	2,3,6	4,5,6	3	2,3,6	3	1,4,5	1,4,5	2,3,4,6,8	2,3,4,6,8	all others	all others	4,5,6
CASE GND	—	—	—	—	—	3	—	3	—	—	—	—	—	—	—
NOT USED	—	4	—	—	—	—	—	—	—	—	—	—	—	—	—

[^] pins must be connected together externally

¹ pin connection physically same as w

² pin connection physically same as gk



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