

■各種高周波モジュール

*1: 基板実装型対応 量産対応可

*2: 生産終了予定 詳細はお問い合わせ下さい

Amplifiers	Freq. Range	gain	P1dB	ICP2	ICP3	NF	S11	S22	Power Supply				Dimensions			Application	
									+Vcc		-Vee		w	h	d		
									V	mA	V	mA	mm				
	AIRT10DC-00/2.5G	DC ~ 2.5G	28	8	-	-	7	-10	-10	10	250	10	20	50	70	19	PCM, Pulse
*2	AIRT10AC-40M/16G	40M ~ 16G	38	10	-	-	12	-15	-15	5	150	Vee x 4		21	40	12	Fine Delay
	AIRT10AC-50K/12G	50k ~ 12G	29	8	-	-	7	-10	-10	8	150	Vee x 3		21	29	12	High-rate PCM
*2	AIRT10AC-300K/14G	300k ~ 14G	35	10	-	-	12	-10	-10	5	150	Vee x 4		21	40	12	High-rate PCM
	AIRT12DC-00/10G	DC ~ 10G	20	12	-	-	10	-10	-10	12	100	-12	50	49	30	7	PCM, Pulse
*1	AIRT12AC-6K/7.0G	6k ~ 7G	22	12	50	35	6	-15	-15	12	150	-	-	35	50	19	Low Distortion
*2	AIRT12AC-3K/16G	3k ~ 16G	16	12	-	-	10	-6	-6	12	150	2	20	29	16	12	PCM
*2	AIRT12AC-40K/12G	40k ~ 12G	25	12	-	-	10	-12	-10	12	100	2	20	29	16	12	Fine Delay
	AIRT13AC-800/12G	800M ~ 12G	19	13	-	-	10	-13	-6	10	100	-	-	47	30	7	PCM, Pulse
*2	AIRT14AC-100K/9.0G	100k ~ 9G	30	14	-	-	7	-6	-6	10	250	2	20	50	70	19	PCM
	AIRT15AC-2K/2.5G	2k ~ 3.6G	18	14	-	-	6	-12	-12	6.5	70	-	-	20	30	8	PCM
	AIRT16AC-50K/4.0G	50k ~ 4G	28	15	-	-	7	-10	-12	10	250	2	20	50	70	19	PCM
	AIRT17AC-2K/2.5G	2k ~ 2.5G	30	15	-	-	7	-15	-15	15	250	2	20	50	70	19	PCM, Fine Delay
*1	AIRT17AC-2K/5.4G	2k ~ 5.4G	20	17	-	36	7.5	-15	-15	12	180	-	-				PCM, Analogue
*1	AIRT18AC-1.5K/2.5G	1.5k ~ 2.5G	18	18	-	-	5.0	-15	-15	12	70	-	-	35	50	19	High Power PCM, Fine Eye
*2	AIRT18AC-50K/3.2G	50k ~ 3.2G	18	18	65	33	5	-12	-13	5	250	-	-	35	50	19	High ICP2
	AIRT18AC-100K/10G	100k ~ 10G	18	18	-	-	10	-13	-6	7	200	2	20	29	16	12	High-rate PCM, Fine Delay
*1	AIRT20AC-200M/800M	400M ~ 800M	18	18	-	32	1.0	-18	-8	5	140	-	-	35	25	8	256QAM, 64QAM, OFDM
	AIRT25AC-4K/5.0G	4k ~ 5G	27	25	-	-	7	-6	-10	10	300	2	20	50	70	38	High Power PCM
*1	AIRT27AC-30K/2.5G	30K ~ 2.5G	27	25	-	-	-	-12	-12	12	250	5	10	35	50	19	High Power PCM
*1	AIRT48ICP800MAC-00	100M ~ 900M	15	25	-	45	1.5	-15	-20	8	260	2	10	35	50	19	High ICP3
	AIRTP/P-10M/900M	10M ~ 900M	20	23	75	45	7	-15	-20	7	1000	5	30	100	65	80	Push-Pull
	AIRTP/P-50M/2.0G	50M ~ 2.5G	19	18	68	38	7	-10	-10	6	500	-	-	35	50	19	Push-Pull

Bias-Tee	Freq. Range		Loss	S11	S22	delay	Supply Current	Dimensions		
	min	max						w	h	d
	Hz							mm		
	1k	10G	-1	-20	-20	15	100	11	28	12

Filters	Cut-off Frequency / Freq. Range	Loss	S11	S22	delay	stage	Dimensions			Application
							w	h	d	
							mm			
	55M	-0.5	-15	-15	-	5	21	29	12	Chevichev
	175M	-0.5	-15	-15	-	5	21	29	12	Chevichev
	470M	-	-6	-6	20	5	21	29	12	622Mbps Bessel
	1.8G	-0.5	-6	-6	15	5	21	29	12	2.48Gbps Bessel
	395~410M	-5	-15	-15	-	-	custom			-100dB Stopband

Divider/Coupler	Freq. Range		Loss	S11	S22	Isolation	Dimensions
	min	max					
	Hz						
	10M	1.0G	4	-12	-12	-20	TBD
	1.8G	3.5G	3.5	-15	-15	-20	TBD
	460M	1.3G	3.2	-20	-25	-25	TBD

VCOs		Freq. Range		Output Power	Phase Noise	Vc		Power Supply		Spurious	Dimensions		
		min	max			min	max	+Vcc			w	h	d
		Hz		dBm	dBc/Hz	V		V	mA	dBc	mm		
*1	VCOIRT1.1-1.24G/5V	1.1G	1.24G	-7	-105(50kHz)	0	18	5	50	-60	35	25	10
*1	VCOIRT1.35-1.65G/5V	1.35G	1.65G	-7	-100(50kHz)	0	18	5	50	-60	35	25	10
*1	VCOIRT1.9-2.8G/5V	1.9G	2.85G	-5	-109(200kHz)	0	18	5	50	-60	35	25	10
*1	VCOIRT0.45-0.9G/10V	450M	900M	0	-110(50kHz)	0	10	12	30	-60	35	25	10

FM-Modulator		Carrier Freq.		Output I/F	Input Freq.		Modulation Linearity	Power Supply				Dimensions		
		min	max		min	max		+Vcc		-Vee		w	h	d
		Hz		PECL	Hz		%	V	mA	V	mA	mm		
*2	FMMODIRT35M	20M	40M	PECL	DC	10MHz	<2	5	100	5	100	35	25	10

PLL Synthesizer		Freq. Range		Output Power	Channel Space	Phase Noise	Power Supply				Dimensions		
		min	max				+Vcc1		+Vcc2		w	h	d
		Hz		dBm	MHz	dBc/Hz	V	mA	V	mA	mm		
	PLLIRT170-300M	170M	300M	15	10	-90(100Hz)	5	1000	-	-	TBD		
	PLLIRT500-800M	500M	800M	13	5	-113(1kHz)	3.3	500	12	40	120	35	22
	PLLIRT1000-1600M	1000M	1600M	13	10	-105(1kHz)	5	1000	12	40	TBD		
	PLLIRT1500-2400M	1500M	2400M	13	15	-103(1kHz)	5	1000	12	40	TBD		
	PLLIRT2000-3200M	2000M	3200M	13	20	-98(1kHz)	5	1000	12	40	TBD		

FM-Demodulator		Carrier Freq.		Demodulated Freq.		Demodulated Voltage	Modulation Linearity	Power Supply		Dimensions
		min	max	min	max			+Vcc		
		Hz		Hz		V	%	V	mA	
*2	FMDEMIRT0.5-3.5G	0.5G	3.5G	DC	1G	1.0(p-p)	<2	10	40	TBD
*2	FMDEMIRT1.0-7.0G [※]	1.0G	7.0G	DC	1G	1.0(p-p)	<5	10	40	TBD

※FMDEMIRT0.5-3.5Gの1/2分周器追加モデル

Phase-Shifter		Frequency	Shift Angle	Max. Input Power	Loss	Vc		Dimensions			Application
						min	max	w	h	d	
		Hz	deg.	V	dB	V		mm			
	FSIRT2.48G-C-120DEG	2G ~ 3G	>120	5(p-p)	-1	0	18	35	50	10	STM-16

Gain Control		Frequency	Controlable Gain	ICP3	S11	S22	Vc	Power Supply		Dimensions		
								+Vcc		w	h	d
		Hz	dB	dBm	dB	dB	V	mA	mm			
*1	GCIRT10K-2.5G	10k ~ 4G	-4 ~ -24	-	-15	-15	0 ~ 2	2.5	10	26	26	12
*1	GCIRT2.48G-20dB	2k ~ 2.5G	-5 ~ +15	6(OUT)	-12	-12	0 ~ 5	6	30	35	50	10
*1	GCIRT400M-25dB	200M ~ 2.5G	-5 ~ -30	50(IN)	-10	-10	0.5 ~ 4.0	2.5	20	35	25	10
*1	FEIRT450M/850M	100MHz ~ 900MHz	-15 ~ +18	30	10	8	0 ~ 5	5,2.5	10,30	36	26	12

RF-Detector		Frequency	Bandwidth	Gain	S11	Power Supply		Dimensions		
						+Vcc		w	h	d
		Hz	Hz	mV/μW	dB	V	mA	mm		
*1	DIRTM-2.48GHz.pdf	5.8G	200M	100	-15	5	1	35	25	10

Mixer		Frequency	LO Frequency	IF Frequency	LO Level	ICP3	Dimensions		
							w	h	d
		Hz	Hz	Hz	dBm	dBm	mm		

MIRT0-3G/20dBm	0.1M ~ 3.0G	0.1M ~ 3.0G	DC ~ 1.0G	+18	+20	35	25	10
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O/E Converter	Frequency	Traceability	ORL	Sensitivity	Dimensions		
	Hz	dB	dB	A/W	w	h	d
	mm						
OEIRTDC-2.4G_PREPD	DC ~ 2.4G				77	45	16
OEIRTDC-3G-PD	DC ~ 3.0G	+/-0.15dB	<-40	0.52(1550nm)	80	115	20

E/O Converter	Frequency	Wavelength	RF input	Input RF	Dimensions		
	Hz	nm	ch	dBm	w	h	d
	mm						
EOIRT10M-780M-CATV	10M ~ 800M	1310	over 40ch SCM(AM/QAM)	-20(m;10%)	100	150	45

OSR Transmitter	Frequency	Opt.loss	CNR	IM	Rate	Power	Dimensions		
	Hz	dB	dB	dB	bps		w	h	d
	mm								
EOIRT-B-X1 OEIRT-B-X1	16K~2.5G	5~10	>60(6MHz)	>-58(30SCM)	50M~3G	battery available	87	45	16

Power Supply	Total Output Power	Output Voltage	Noise	Dimensions		
	W	V	dBm	w	h	d
	mm					
PIRT-xxxx	20(max)	+12,+9,+5,+3.3,-2,+90	<-80	module-mounted		