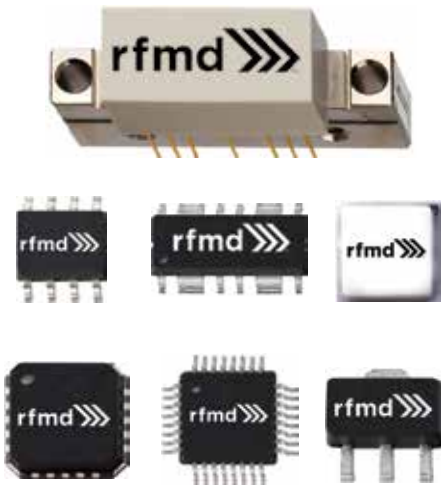


Broadband Solutions For Today And The Future



RFMD leads in performance, innovation, technology, and reliability solutions for the wired broadband market. We continue to invest in this market ensuring our products meet current and future requirements.

RFMD offers best-in-class broadband, GaAs, GaN, and silicon-based High Power CATV hybrid amplifiers. In addition, RFMD also offers low to medium power general purpose MMIC amplifiers, analog/digital attenuators, switches, and fiber optic components for broadband customer premise and broadband transmission equipment.

Power Doublers

RFMD offers a broad range of power-doubler amplifiers developed for CATV transmission applications. These amplifiers use leading technologies, including GaN, to provide unmatched superior performance covering frequency operations up to 1600MHz. Our product selection of power doublers includes various gains ranging from 18dB to 30dB with various output levels up to 63dBmV. Some RFMD power doublers feature the unique capability of programmable current, allowing designers to optimize current and linearity by externally adjusting DC current.

Broadband Transmission

Optical Nodes • SMATV • MDU

Line Amplifiers • Edge QAM

Head Ends • FTTH • RFoG • CPE

Digital Video Broadcast

Push-Pull Amplifiers

The RFMD differential, push-pull amplifiers offer gains in the 18dB to 34dB range, maximizing flexibility in the CATV transmission path. These hybrid amplifiers are designed for use as driver stages to enhance CATV access networks. They employ GaAs MESFET, GaAs pHEMT, and GaN HEMT die and operate from 40MHz to 1200MHz — all in an industry-standard SOT-115J package, or in a newly released surface mount multi-chip module, SMT MCM.

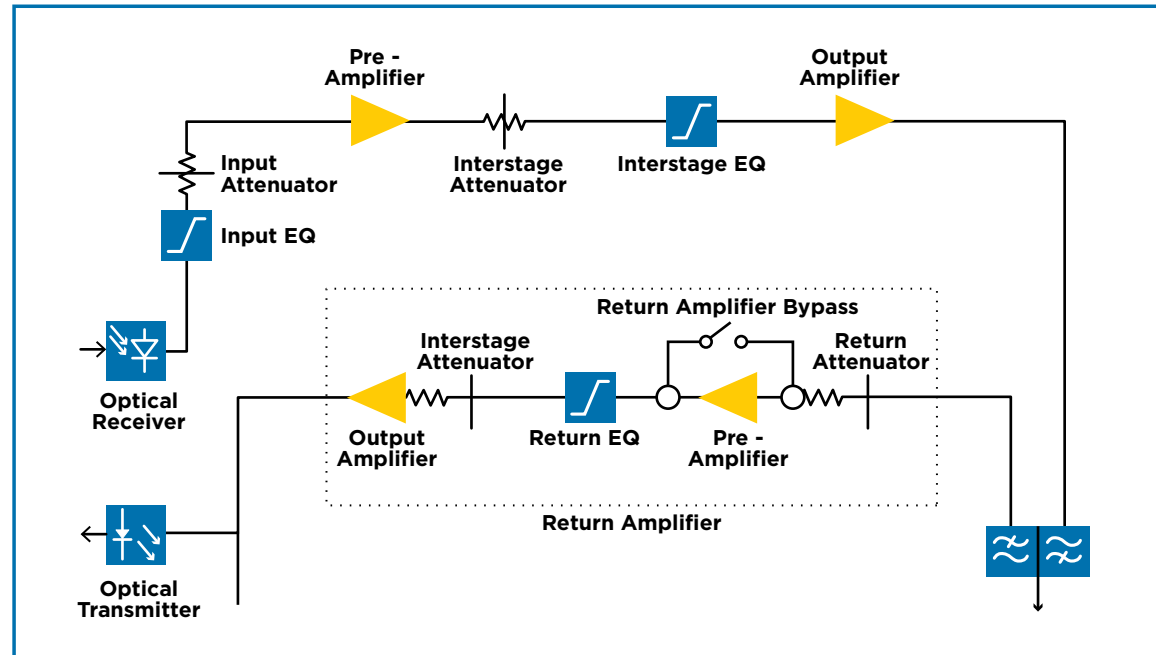
Reverse Amplifiers

RFMD's hybrid reverse amplifiers complete the CATV transmission path. Our reverse path amplifiers come in an industry-standard SOT-115J package or in a newly released surface mount, multi-chip module, SMT MCM. RFMD offers the broadest range of reverse amplifiers with gains ranging from 23dB to 40dB and frequencies of 5MHz to 300MHz for future network upgrades and enhancements. Our devices provide optimal reliability with low noise, and are well suited for reverse channel systems.

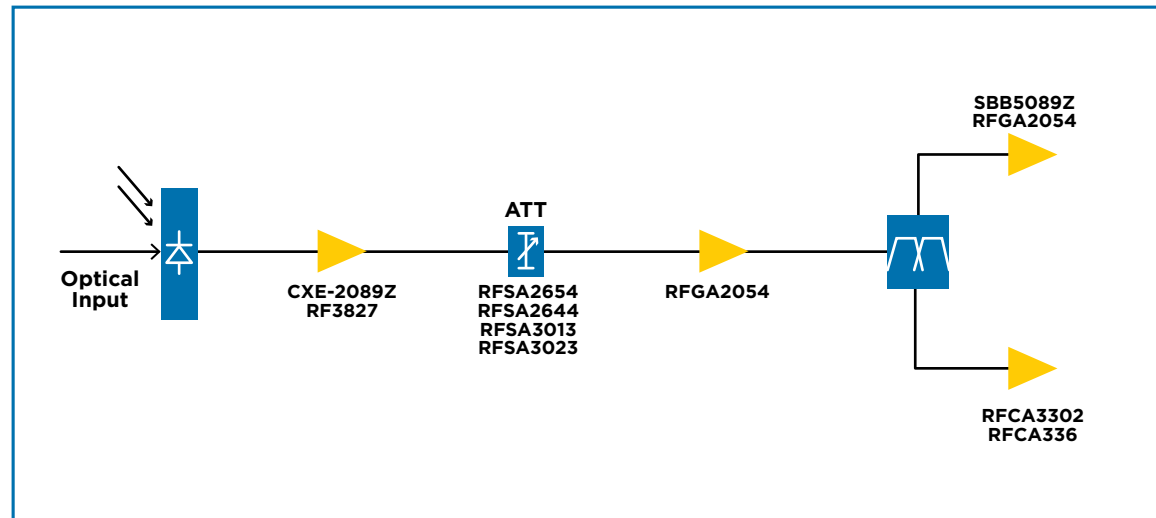
Optical Receivers

RFMD offers a family of optical receivers for both forward and reverse paths. These high-dynamic range receiver amplifiers operate from 40MHz to 1200MHz for forward and 5MHz to 300MHz reverse. The module contains a single-mode optical input, suitable for wavelengths from 1290nm to 1600nm, a terminal to monitor PIN diode current, and matched to 75Ω output impedance. The receivers have extremely low noise, less than $3.0\text{pA} / \sqrt{\text{Hz}}$ and are packaged in an industry-standard SOT-115J package.

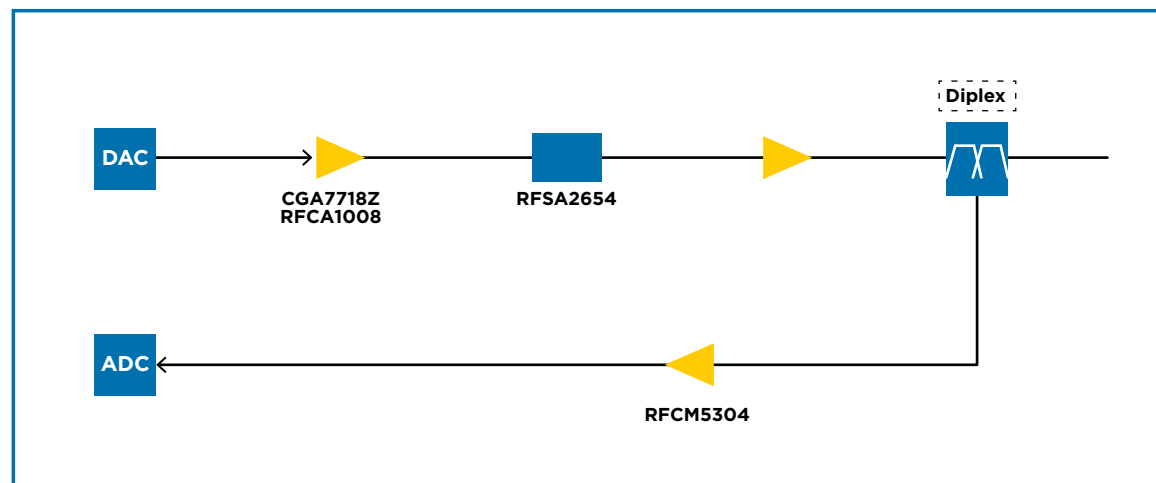
CATV Optical Node



SMATV Optical Receiver



DOCSIS 3.0



Technology	Amplifier Type	P/N	Frequency Range MHz	Gain Type dB	Input/ Output RL dB	CTB (typ) dB	CSO (typ) dB	CTB/CSO Test Condition			NF (typ) dB	Vcc V	Icc (typ) mA	Package
								Channels	Output Power dBmV	Tilt dB				
High Power Push-Pull PA														
GaN	PP	RFCM2680	40-1000	23.0	20/20	-73	-75	79A+75D	60.0	18	3.0	24	430	MCM 9x8
GaN	PD	RFCM3050	40-1000	25.0	17/18	-75	-70	79A+75D	56.0	13.4	5.0	24	420	MCM 11x 8.5
GaN	PP	RFCM3080	40-1000	28.5	17/18	-68	-75	79A+75D	46.0	0	4.5	24	250	MCM 11x 8.5
GaAs	PP	RFAM2790	40-1000	8 to 28	20/18	-67	-70	79A+75D	46.0	0	4.0	12	410	MCM 11x11
GaAs	PP	SPD2226Z	40-1000	15.0	12/18	-84	-76	79CH	34.0	0	2.3	6	500	SOF-26
InGaP	PP	RFC A1008	5-1000	17.4	27/16	-76	-80	79CH	34.0	0	4.0	5	215	SOIC-8
GaAs	PP	RFAM3790	40-1218	8 to 28	18/18	-67	-70	79A+75D	46.0	0	4.0	12	410	MCM 11x11
GaAs	PP	RFC A8828	50-12018	15.0	15/17	-78	-82	79CH	34.0	0	3	5	385	SOIC-8
GaAs	PP	RFC A8830	45-12018	19.5	20/20	-70	-77	79CH	34.0	0	2	5	260	SOIC-8
GaN	PD	RFCM3316	40-1218	23.0	18/18	-80	-80	79A+75D	60.0	22	3.0	24	430	MCM 9x8

General MMIC

Technology	Amplifier Type	P/N	Frequency Range MHz	Gain Type dB	Input/ Output RL dB	CTB (max) dB	CSO (max) dBc	CTB/CSO/XMOD Test Condition	NF dB	Vcc V	Icc (max) mA	Package		
									Channels	Output Power dBmV	Tilt dB			
InGaP	Single	RFC A3302	40-1000	21.5	15/13	-83	-65	79	26	0	3.0	5	125	SOT-89
GaAs	Single	RFC A3306	50-1000	22.0	13/15	-87	-60	79	29	0	3.0	8	140	SOT-89
GaAs	Single	CXE2089Z	50-1000	20.0	13/14	-75	-65	79	20	0	1.5	7	105	SOT-89
InGaP	Single	CGB1089Z	50-1000	16.0	19/15	-77	-65	79	25	0	3.5	5	80	SOT-89
GaAs	Single	RF2317	DC-3000	15.0	18/11	-84	-62	79	25	0	4.8	9	180	CJ2BATO
GaAs	Single	RF3827	5-1500	20.5							1.3	7	120	QFN3x3
GaAs	Single	RF2312	DC-2500	16.0	17/20	-80	-64	79	26	0	4.3	5	100	SOIC-8
InGaP	PP	RFC A1008	5-1000	17.4	27/16	-76	-80	79	34	0	4.0	5	215	SOIC-8
GaAs	PP	RFC A8818Z	50-1000	17.0	10/15	-64	-62	77	34	0	2.0	7	220	SOIC-8
GaAs	PP	CGA6618Z	5-1000	14.0	15/12	-70	-81	79	34	0	5.4	5	160	ESOP-8
SiGE	PP	CGA3318Z	5-900	12.0	17/12	-68	-70	79	34	0	4.3	4	150	ESOP-8

General Reverse Path PA

Technology	I/O Config	P/N	Frequency Range MHz	Gain Type dB	Input/ Output RL dB	CTB (max) dB	CSO (max) dBc	CTB/CSO/XMOD Test Condition	NF dB	Vcc V	Icc (max) mA	Package		
									Channels	Output Power dBmV	Tilt dB			
GaAs	Single	CXE2089Z	5-1000	20	13/14				1.5	7	105	SOT-89		
InGaP	PP	RFC A1008	5-1000	17.4	22/22	-67	-80	7	50	0	4.0	5	217	SOIC-8
InGaP	PP	CGR0118Z	5-65	25.4	20/20	-60	-80	7	50	0	3.0	5-12	130	SOIC-8
InGaP	PP	CGR0218Z	5-210	17.3	22/22	-67	-80	7	50	0	4.0	5	217	SOIC-8
GaAs	Single	RF2317	DC-3000	15.0	18/11				4.8	8	180	CJ2BATO		
GaAs	Single	RF2312	DC-2500	16.0	17/20				4.3	5	100	SOIC-8		
GaAs	Single	RF3827	5-1500	20.5					1.5	7	120	QFN3x3		

CATV Set-Top Application-Specific ICs

Type	P/N	Impedance Ω	Frequency Range MHz	Gain dB	AGC Range dB	NF dB	Vcc V	Icc mA	Package
Out-of-Band Tuner	RFFC0085	75	50-150	77.0	55.0	15.0	3.3	106	QFN
Out-of-Band Tuner	S510065-55Z	75	50-150	82.0	55.0	13.0	3.3	117	QFN

Attenuator and Switch

Technology	Type	P/N	Impedance Ω	Frequency Range MHz	Input/ Output RL dB	IP0.5dB dB	Gain Range dB	CTB (max) dB	CSO (max) dBc	CTB/CSO/XMOD Test Condition	Vcc V	Package			
											Channels	Output Power dBmV	Tilt dB		
GaAs	DA	RFS A2654	75	5-2000	17.5/17.5	30	31.5				5	MCM 24-Pin			
SI	VA	RFS A3013	75	50-3000	10/10	30	35.0	-70	-65	112	39	0	5	QFN 16-Pin	
SI	VA	RFS A3023	75	50-3000	10/10	30	35.0	-70	-65	112	39	0	3.3	QFN 16-Pin	
SI	Switch	RFS W1012	75	5-2500	15/15	33	NC	-100	-100	137	41	0	3	QFN 12-Pin	