



CATV Dual Output Modulator (YBBM)

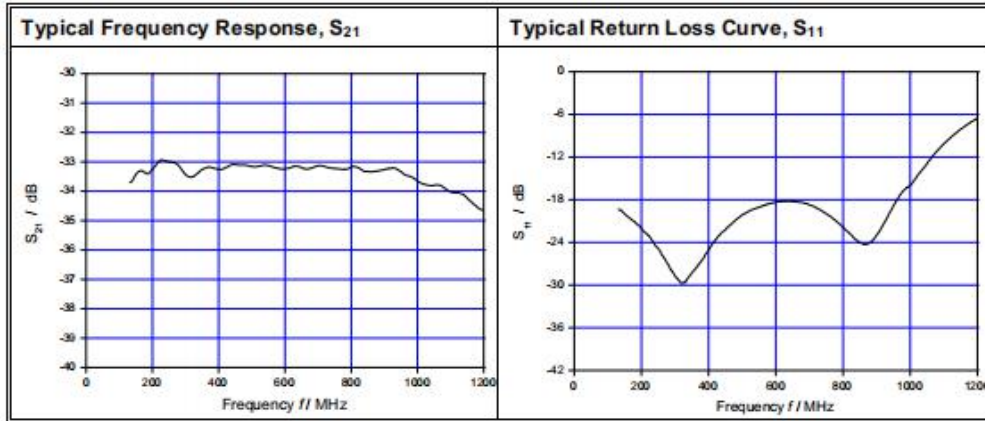


Features

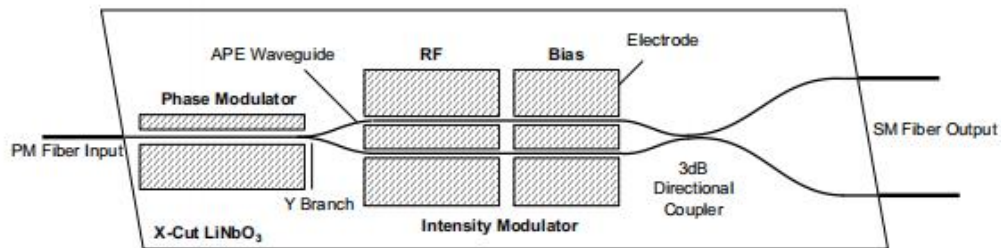
- 1550 wavelength Band
- Flat Response From 40 MHz ~ 960MHz
- +30 dBm Rated Phase Modulator
- Multiple Functions in a Single Device
- Integrated Traveling Wave Phase Modulator
- Dual Optical Outputs YBBM Design
- Well long-term stability and small package size
- Low RF Drive Voltage
- Low Insertion Loss

Applications

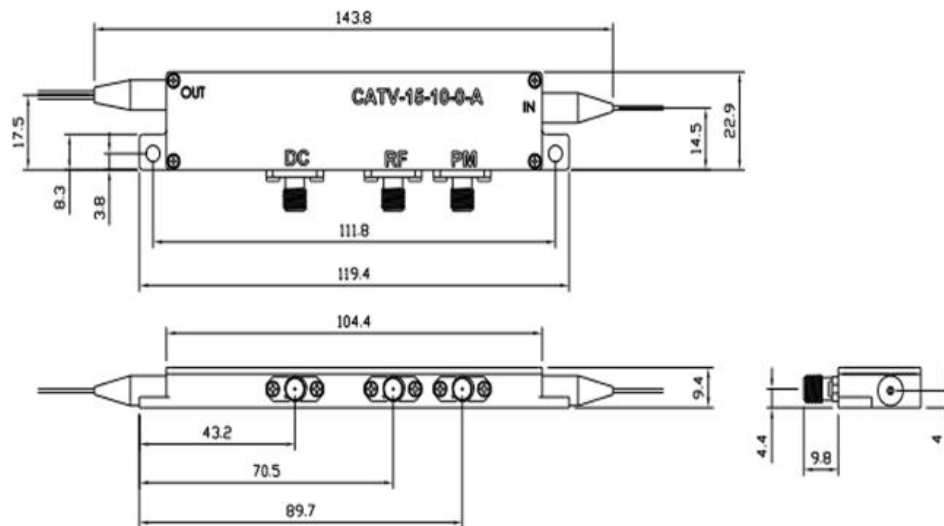
- CATV 1550nm Band Transmitters
- Fiber Optic Sensors



CATV Dual Output YBBM Modulator Schematic



Mechanical Dimensions Diagram, Unit: mm.



Specifications

Parameter	Symbol	Unit	Range	Typical Value
General				



Crystal Material	-	-	-	Lithium Niobate
Crystal Orientation	-	-	-	X-Cut, Y-Propagating
Optical				
Operating Wavelength	λ_R	nm	-	1550±10
Insertion Loss	IL	dB	Maximum	4.5
Insertion loss imbalance between outputs	D	dB	Maximum	1.0
On/off extinction ratio	R	dB	Minimum	20
Optical Return Loss	RL	dB	Maximum	-45
Input optical power	P _{Max}	mW	Maximum	100
Electrical				
Phase Modulator				
Parameter	Symbol	Unit	Range	Typical Value
Half Wave Voltage @ DC	V _π (PM)	V	Maximum	8.5
Operating Bandwidth, DC	BW(PM)	GHz		2.5
Return Loss S ₁₁	S ₁₁ (PM)	dB	Maximum	-8.5
Input Impedances	R(PM)	Ω		50
Applied RF power	P _{Max} (PM)	dBm	Maximum	30
Intensity Modulator RF Port				
Half Wave Voltage V _π , RF @ 10 KHz	V _π (RF)	V	Maximum	6.0
Operating Bandwidth S ₂₁	BW(RF)	MHz	Minimum	40 ~ 960
Amplitude Flatness	Ripple	dB	Maximum	±0.6 (40MHz ~ 200MHz)
				±0.6 (200MHz ~
Return Loss S ₁₁	S ₁₁ (RF)	dB	Maximum	-16 (40MHz ~ 860MHz)
Applied DC voltage	V _{Max} (RF)	V	Maximum	0



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Applied RF power	$P_{Max}(RF)$	dBm	Maximum	24
Intensity Modulator Bias Port				
Half Wave Voltage V_{π} , DC	$V_{\pi}(Bias)$	V	Maximum	5.0
Electrode Impedance	$R(Bias)$	Ω	Minimum	10K
Passive Bias Point, Relative toadrature at 1550 nm		V	Maximum	± 3
Applied DC voltage	$V_{Max}(Bias)$	V	Maximum	± 15
Mechanical				
Package Type	-	-	Typical	Kovar
Mechanical Size	-	mm	Typical	119.4-22.9-9.4
Input Fiber	-	-	Typical	Corning PM Fiber
Output Fiber	-	-	Typical	Corning SM-28 Fiber
Fiber Length	L	cm	Minimum	80
Environment				
Operating Temperature	T_w	$^{\circ}C$	-	-5~70
Storage Temperature	T_s	$^{\circ}C$	-	-40~80

More information is provided on website (www.rof-oc.com), you can also contact us for more information by email (sales@rof-oc.com).