

BPSK MODULATORS

SURFACE MOUNT MODEL: SBM-C4

40 - 1150 MHz

FEATURES:

- ▶ Wide Bandwidth
- ▶ Good Phase & Amplitude Balance
- ▶ Small Size

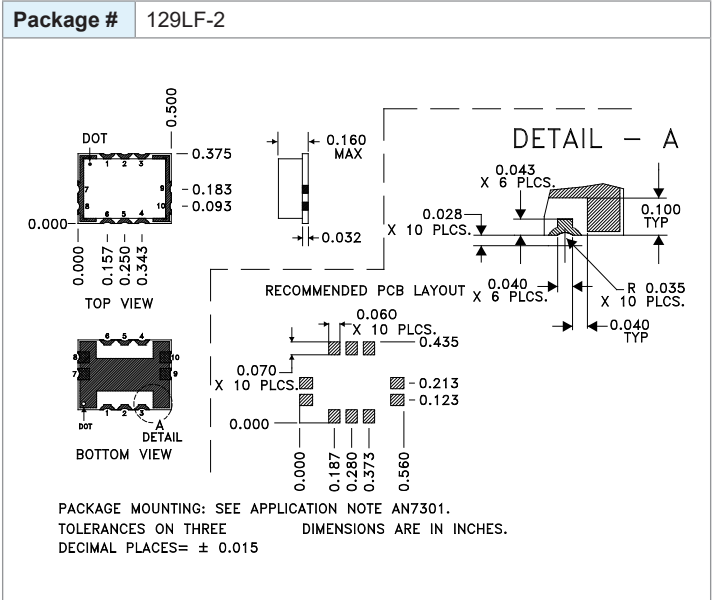
APPLICATIONS:

- ▶ BPSK Modems
- ▶ Wired & Wireless Networks



SPECIFICATIONS (Rev. D 05/21/24)

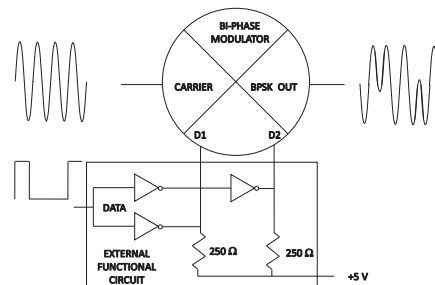
Carrier Frequency	40 - 1150 MHz		
Insertion Loss (dB)	Freq. (MHz)	Typ.	Max.
	40 - 150	3.8	5.0
	150 - 900	3.2	4.5
Phase Unbalance (Deg.) *	Freq. (MHz)	Typ.	Max.
	40 - 150	±2	±4
	150 - 900	±3	±6
Amplitude Unbalance (dB)	Freq. (MHz)	Typ.	Max.
	40 - 150	0.15	0.3
	150 - 900	0.4	0.6
1 dB Compression Point	Freq. (MHz)	Typ.	Max.
	40 - 150	1.68:1	1.80:1
	150 - 900	1.27:1	1.40:1
VSWR	Freq. (MHz)	Typ.	Max.
	40 - 150	1.68:1	1.80:1
	150 - 900	1.27:1	1.40:1
Modulation (D1,D2)	±20 mA		
Modulation Bandwidth	<10% of carrier frequency		
Impedance	50 Ohms (Nom.)		
Operating Temperature Range	-40 to +85 °C		
* From 0°/180° states Note: Maximum RF input power without damage is 150 mW or ±40 mA.			



PORT CONFIGURATION

Input	Output	D1	D2	GND.	No. Conn.
1	3	6	4	7,8,9,10	2,5

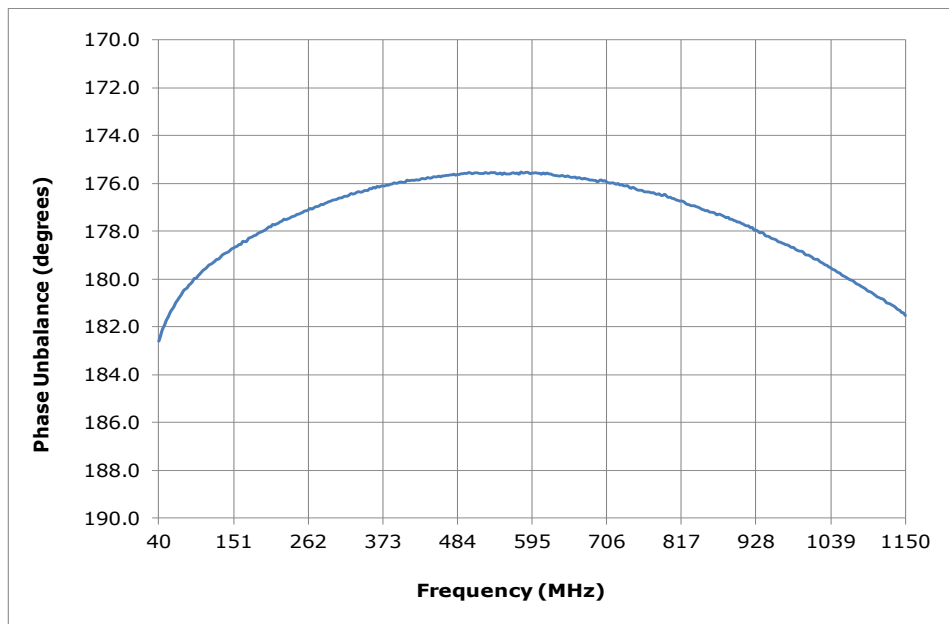
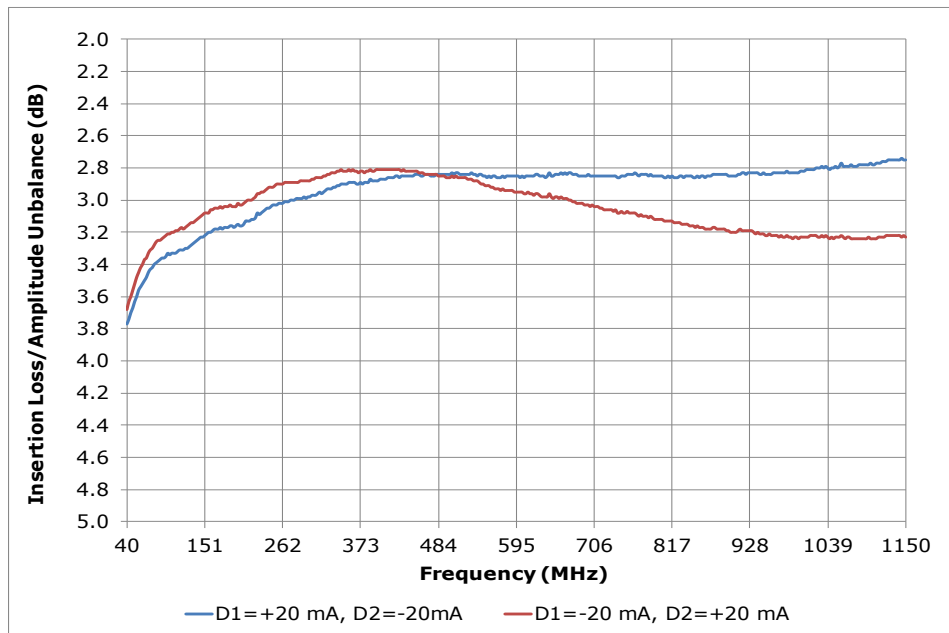
FUNCTIONAL DIAGRAM



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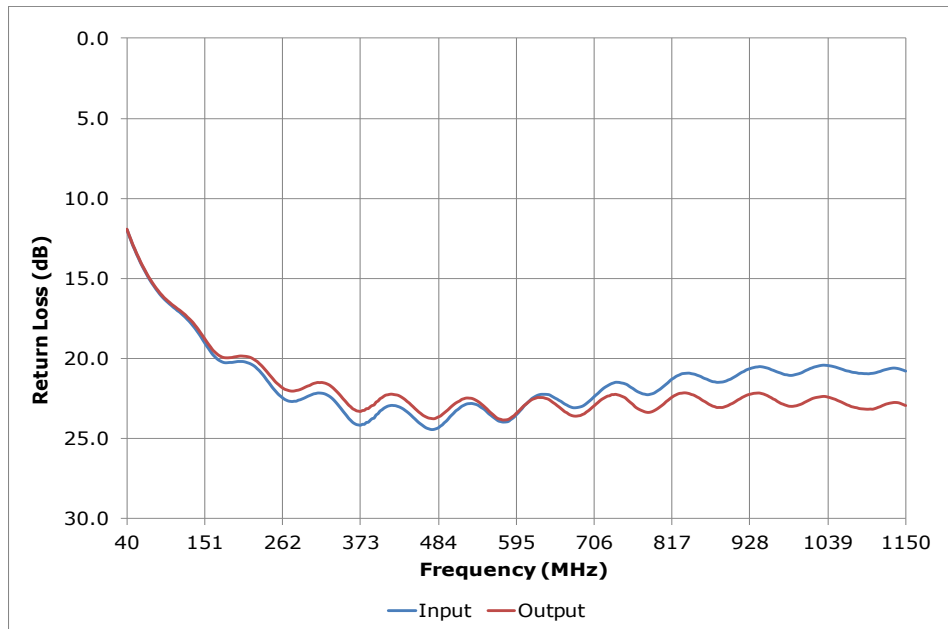
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PERFORMANCE PLOTS