

# BPSK MODULATORS

## SURFACE MOUNT MODEL: SBM-C4

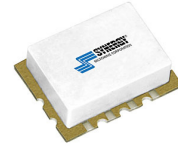
**40 - 1150 MHz**

**FEATURES:**

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

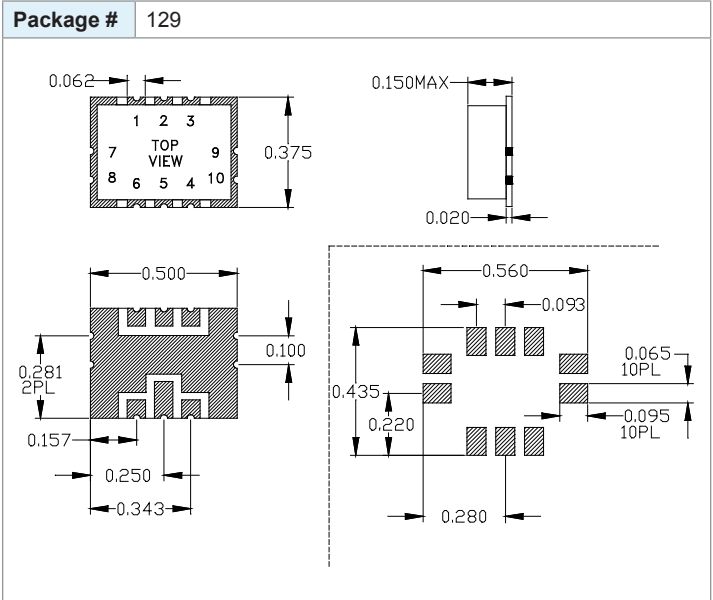
**APPLICATIONS:**

- ▶ BPSK Modems
- ▶ Wired & Wireless Networks



**SPECIFICATIONS (Rev. A 01/19/15)**

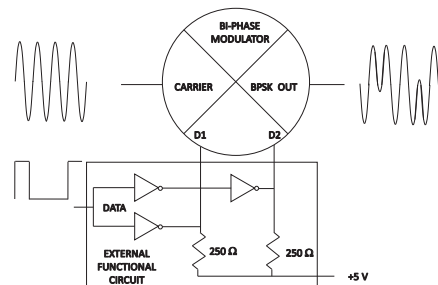
<b>Carrier Frequency</b>	40 - 1150 MHz		
<b>Insertion Loss (dB)</b>	Freq. (MHz)	Typ.	Max.
	40 - 150	3.8	5.0
	150 - 900	3.2	4.5
	900 - 1150	3.2	5.0
<b>Phase Unbalance (Deg.) *</b>	Freq. (MHz)	Typ.	Max.
	40 - 150	±2	±4
	150 - 900	±3	±6
	900 - 1150	±2	±5
<b>Amplitude Unbalance (dB)</b>	Freq. (MHz)	Typ.	Max.
	40 - 150	0.15	0.3
	150 - 900	0.4	0.6
	900 - 1150	0.4	0.6
<b>1 dB Compression Point</b>	+10 dBm (Nom.)		
<b>VSWR</b>	Freq. (MHz)	Typ.	Max.
	40 - 150	1.68:1	1.80:1
	150 - 900	1.27:1	1.40:1
	900 - 1150	1.21:1	1.35:1
<b>Modulation (D1,D2)</b>	±20 mA		
<b>Modulation Bandwidth</b>	<10% of carrier frequency		
<b>Impedance</b>	50 Ohms (Nom.)		
<b>Operating Temperature Range</b>	-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

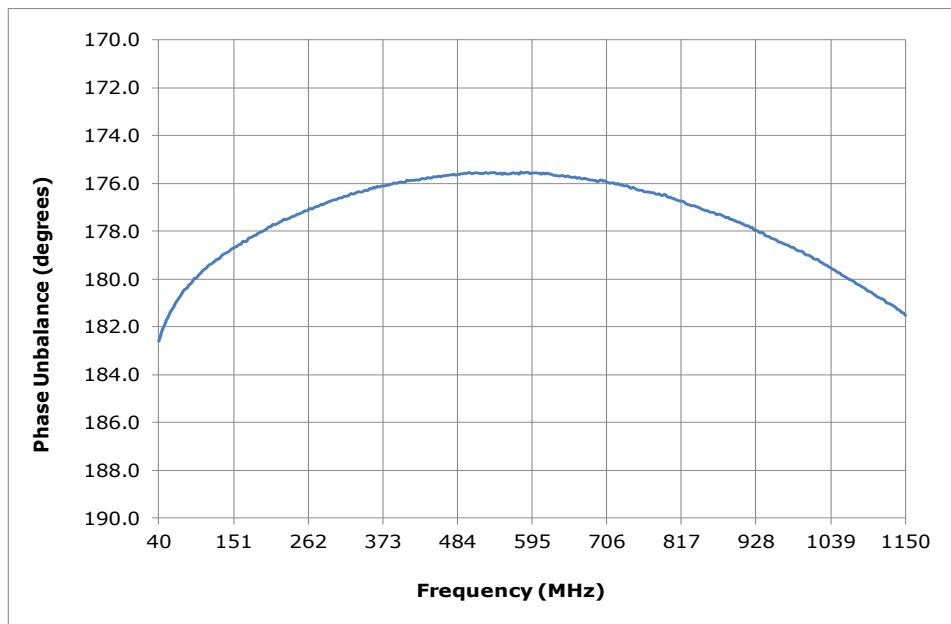
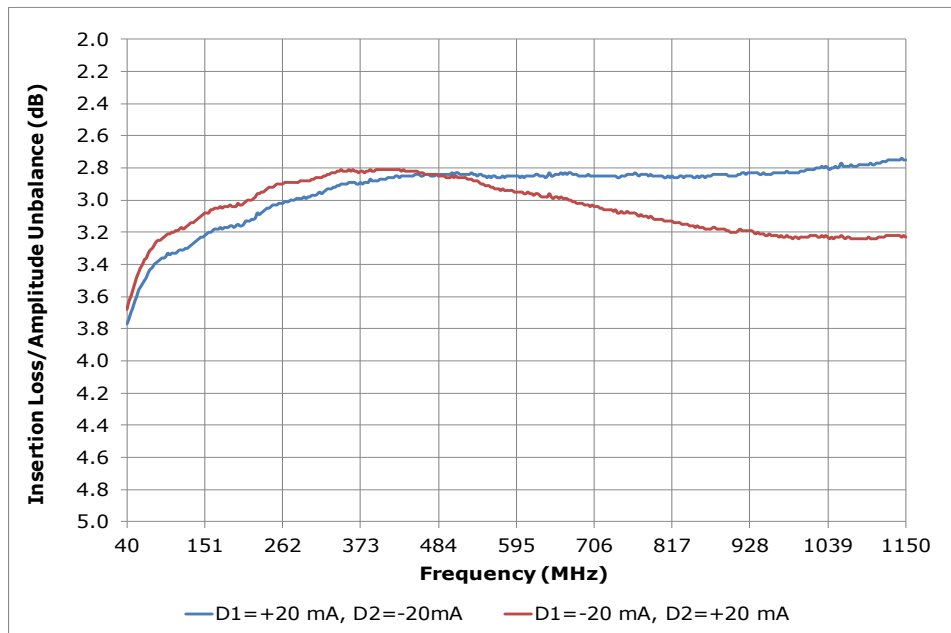
**FUNCTIONAL DIAGRAM**



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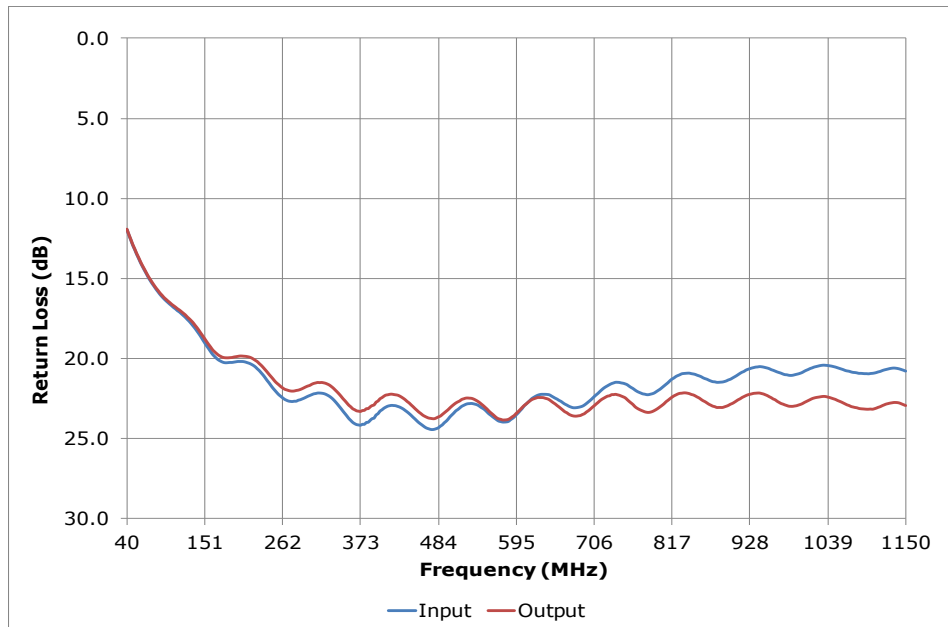
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PERFORMANCE PLOTS