

# Frequency Doubler

# Model FD34SM-1

High Isolation, In-line Output

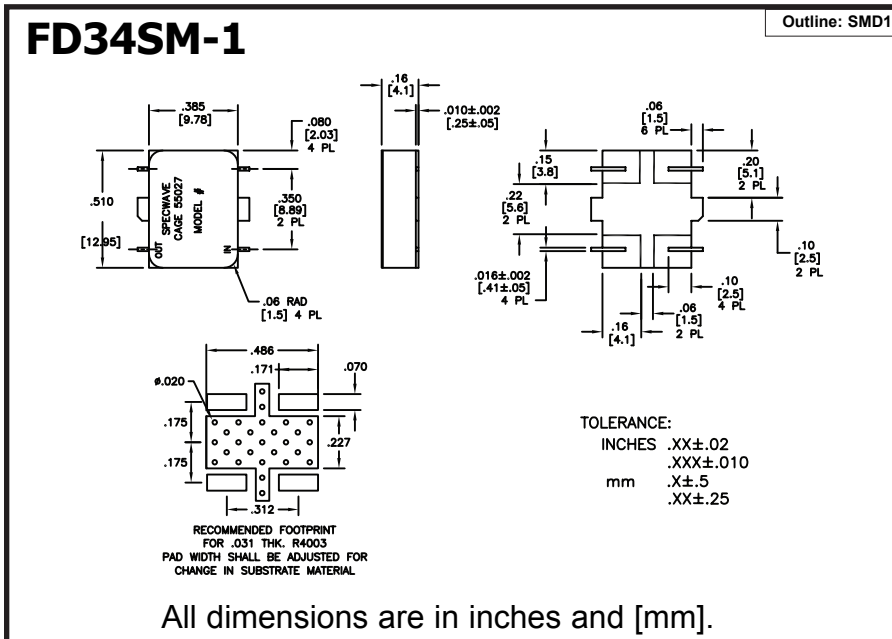
Input 5 to 2800 MHz  
Output 10 to 5600 MHz

## Electrical Specifications:<sup>(1)</sup>

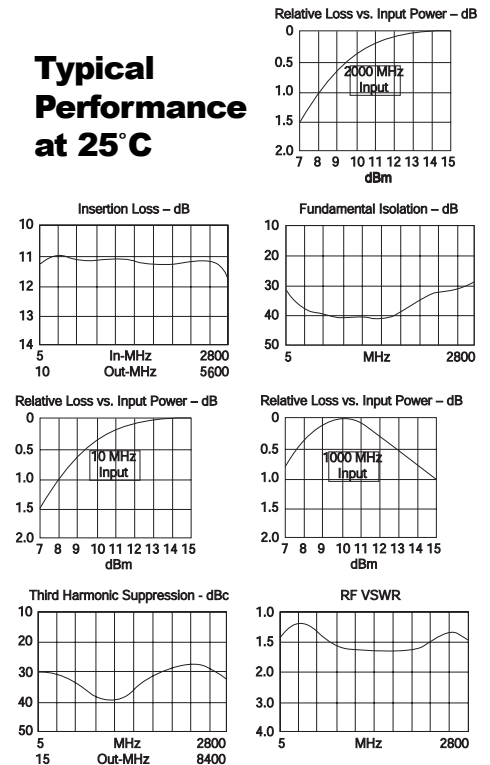
Parameter	Conditions		Specifications		
	Input (MHz)	Output (MHz)	Min	Typical	Max
Insertion Loss: <sup>(2)</sup>	5-2000	10-4000		11.5 dB	13.0 dB
	2000-2800	4000-5600		12.3 dB	14.0 dB
Fundamental Isolation: <sup>(3)</sup>	5-500	10-1000	25 dB	35 dB	
	500-2000	1000-4000	30 dB	40 dB	
	2000-2800	4000-5600	25 dB	35 dB	
Third Harmonic Suppression: <sup>(4)</sup>	5-2800	10-5600	20 dBc	33 dBc	
Input VSWR:	5-500	10-1000		1.5:1	
	500-2000	1000-4000		1.7:1	
	2000-2800	4000-5600		1.5:1	
Input Power:	5-2800	10-5600		+11 dBm	

### Notes:

- Specifications are guaranteed when tested as a doubler in a 50 Ohm system at +25°C with nominal input power. Specifications indicated as typical are not guaranteed.
- Insertion loss typically degrades less than 0.5 dB at +100°C and improves less than 0.5 dB at -55°C.
- Fundamental isolation is referenced to the fundamental input.
- Third Harmonic Suppression is referenced to the second harmonic output.



## Typical Performance at 25°C



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Spectrum Microwave · 2144 Franklin Drive N.E. · Palm Bay, FL 32905 · PH (888) 553-7531 · Fax (888) 553-7532

Spectrum Microwave · 2707 Black Lake Place · Philadelphia, PA 19154 · PH (215) 464-4000 · Fax (215) 464-4001

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