

Directional Coupler, 2-8GHz, 10dB, SMA Female

WMC-2-8-10dB-S



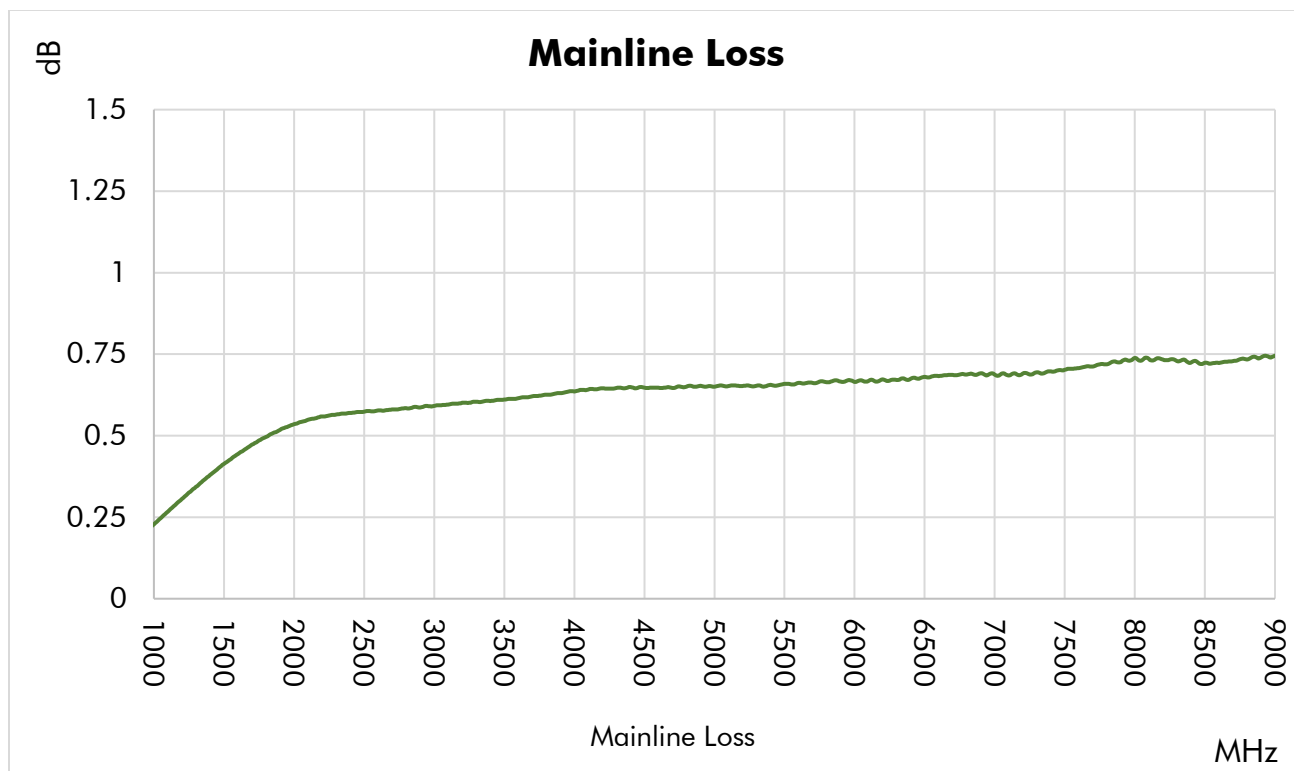
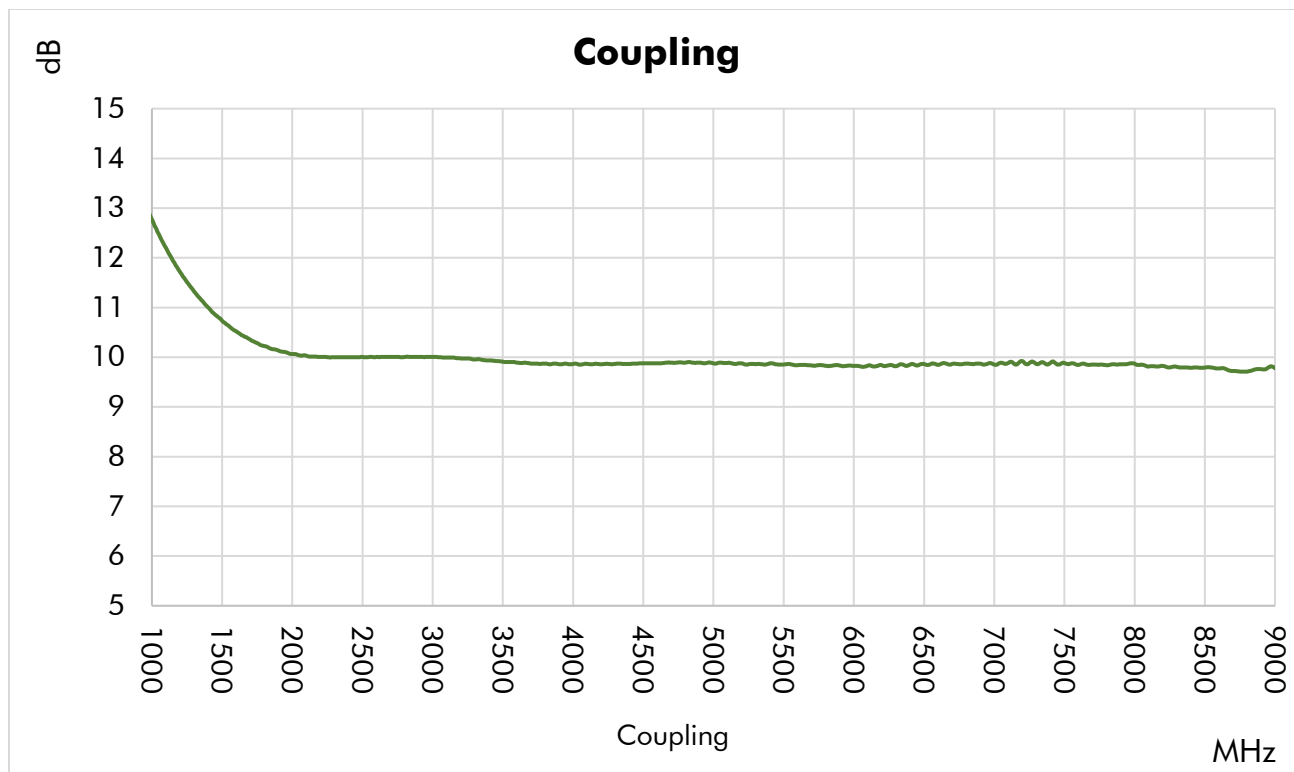
Parameter	Min.	Typ.	Max.	Unit
Frequency Range	2000		8000	MHz
Impedance		50		Ω
Coupling		10 ± 1.0		dB
Frequency Sensitivity (Flatness)		± 0.50	± 1.25	dB, typ.
Mainline Loss ¹		0.72	1.00	dB, max.
Directivity	18	22		dB, min.
Mainline Return Loss	19	23		dB, min.
Secondary Line Return Loss	19	22		dB, min.
Isolation		32		dB, typ.
Forward Power (CW) ²		50		W, max.
Reverse Power (CW) ²		5		W, max.
Termination Power		1		W, max.
DC Current (Input-Output)		1		A, max.

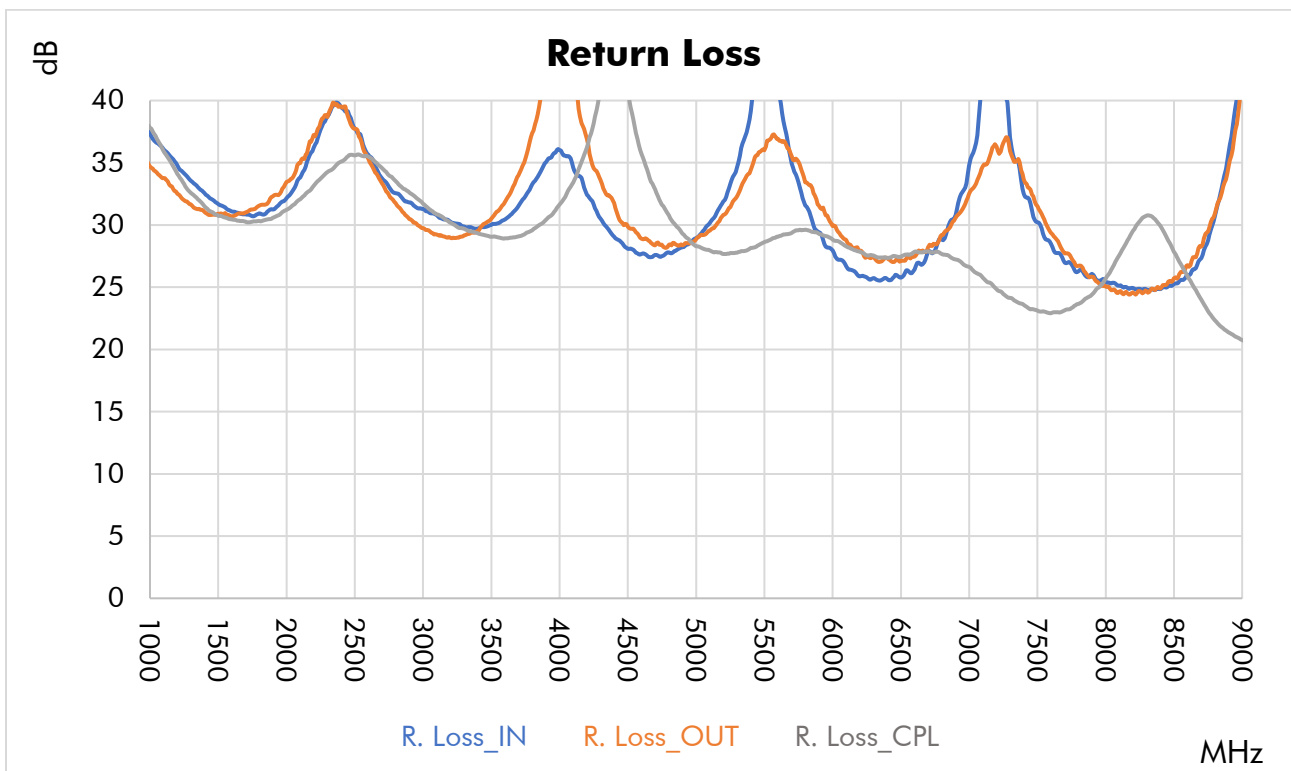
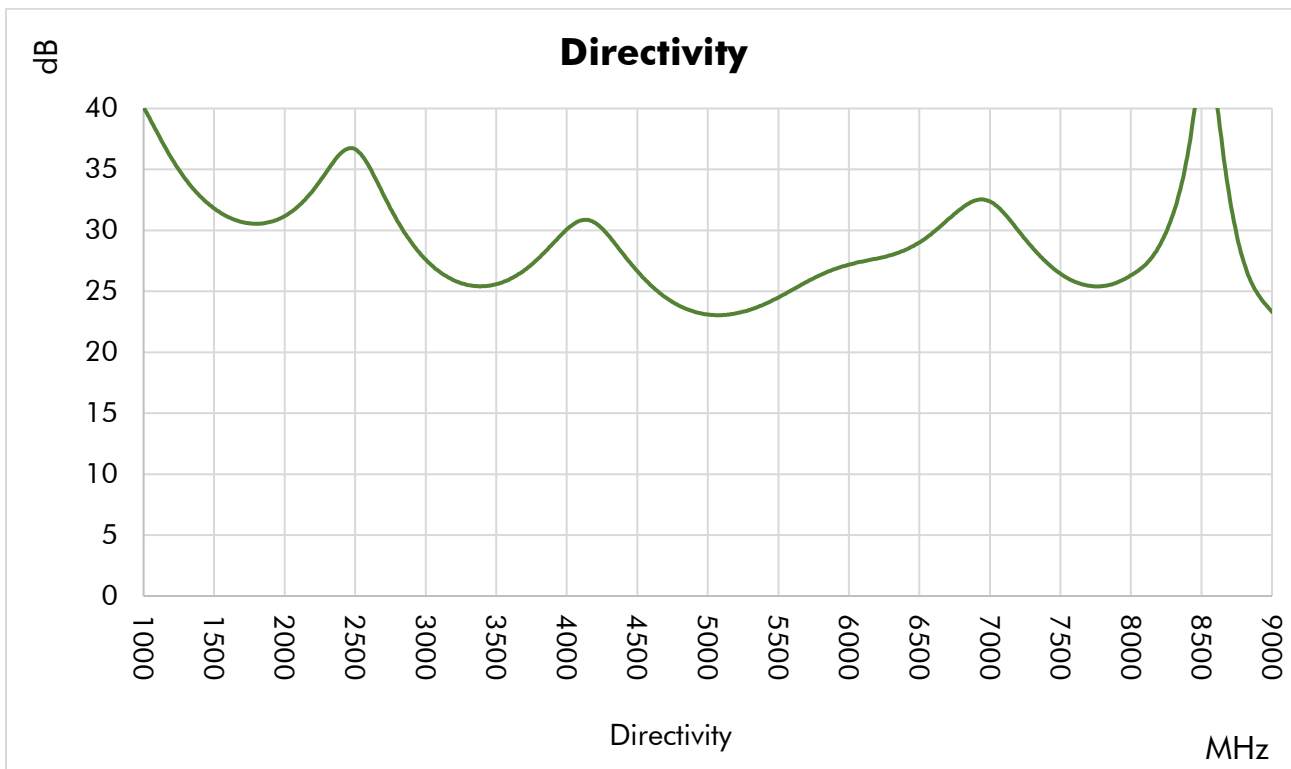
Connector Interface	SMA Female
Operating Temperature ³	-55 to +85 °C
Storage Temperature	-55 to +100 °C
Nominal Weight	28 g (1 oz)
Operating Humidity	10-90% (non-condensing)
Operating Environment	Indoor Use Only
HTSUS Code	8525.50.3035
ECCN	EAR99

RoHS Status ⁴	RoHS3 Compliant
REACH Status ⁴	REACH Unaffected
Enclosure Material	Aluminum
Connectors Material	Stainless Steel
Contacts Material	Beryllium Copper, Gold Plated
Insulators Material	Virgin PTFE
Finish	Green Paint

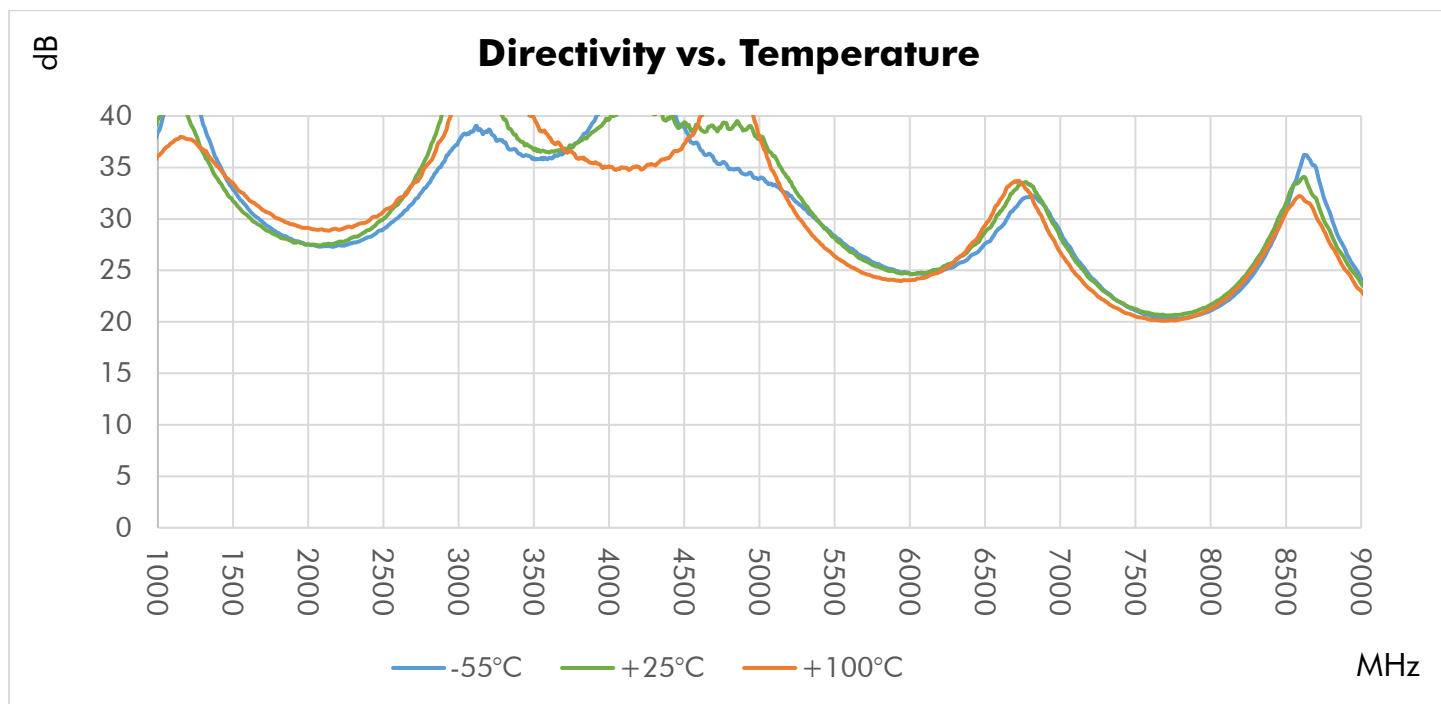
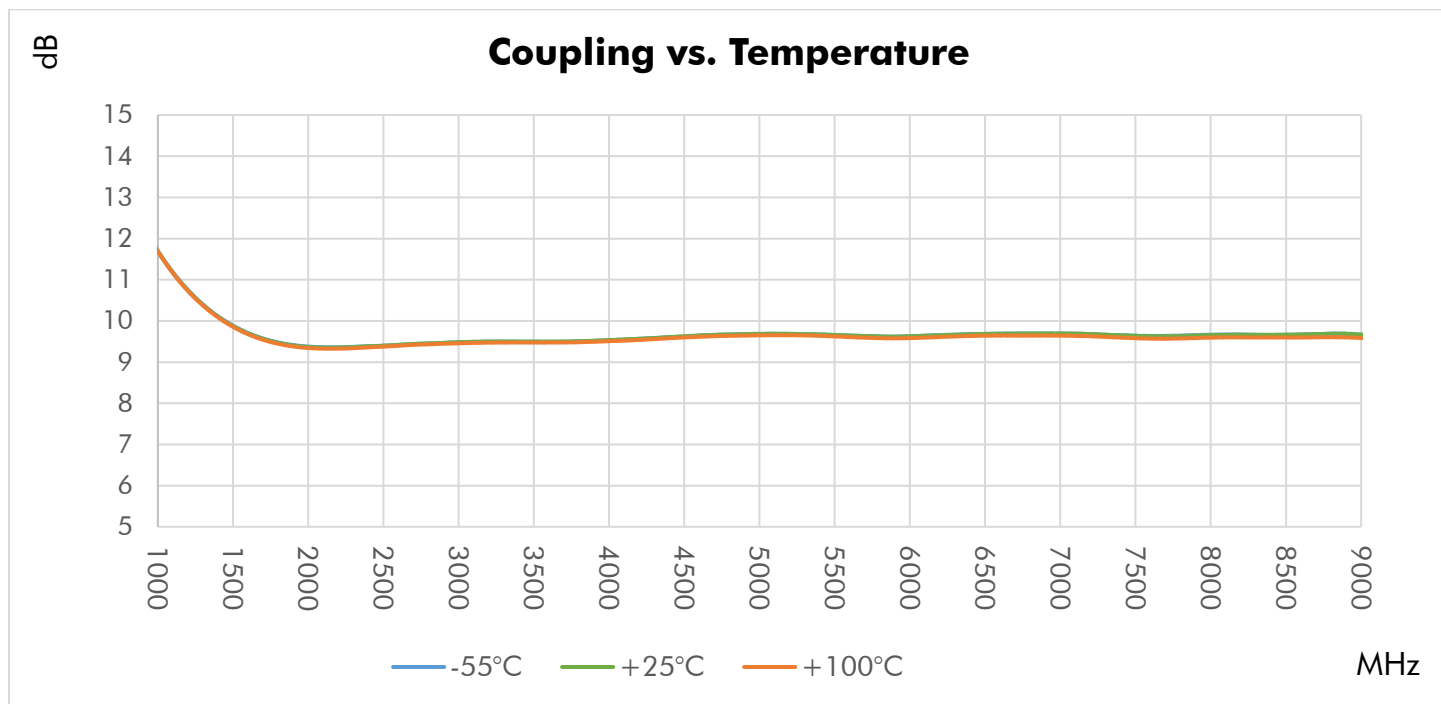
1. Mainline loss includes coupling loss.
2. All output ports should be terminated in a 50-ohm load with 1.2:1 max VSWR.
3. Electrical specifications are tested at +25 °C.
4. To the best of our knowledge at the time of publication.

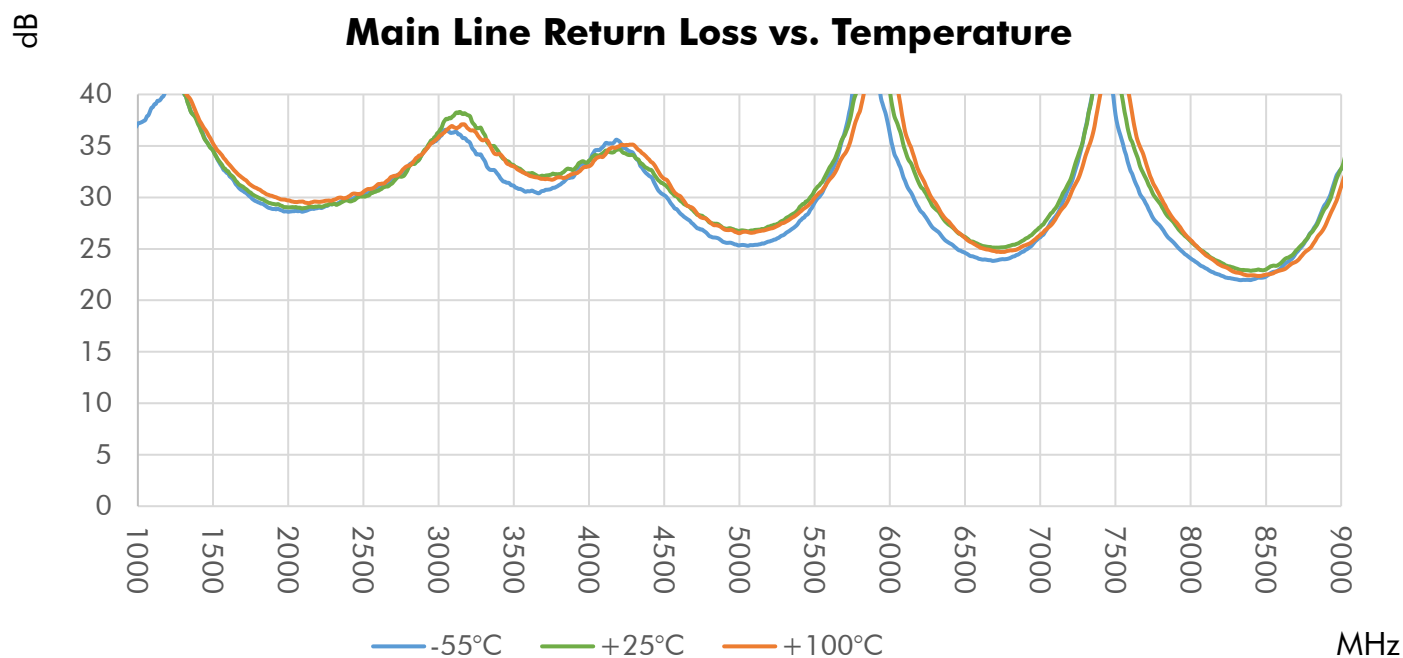
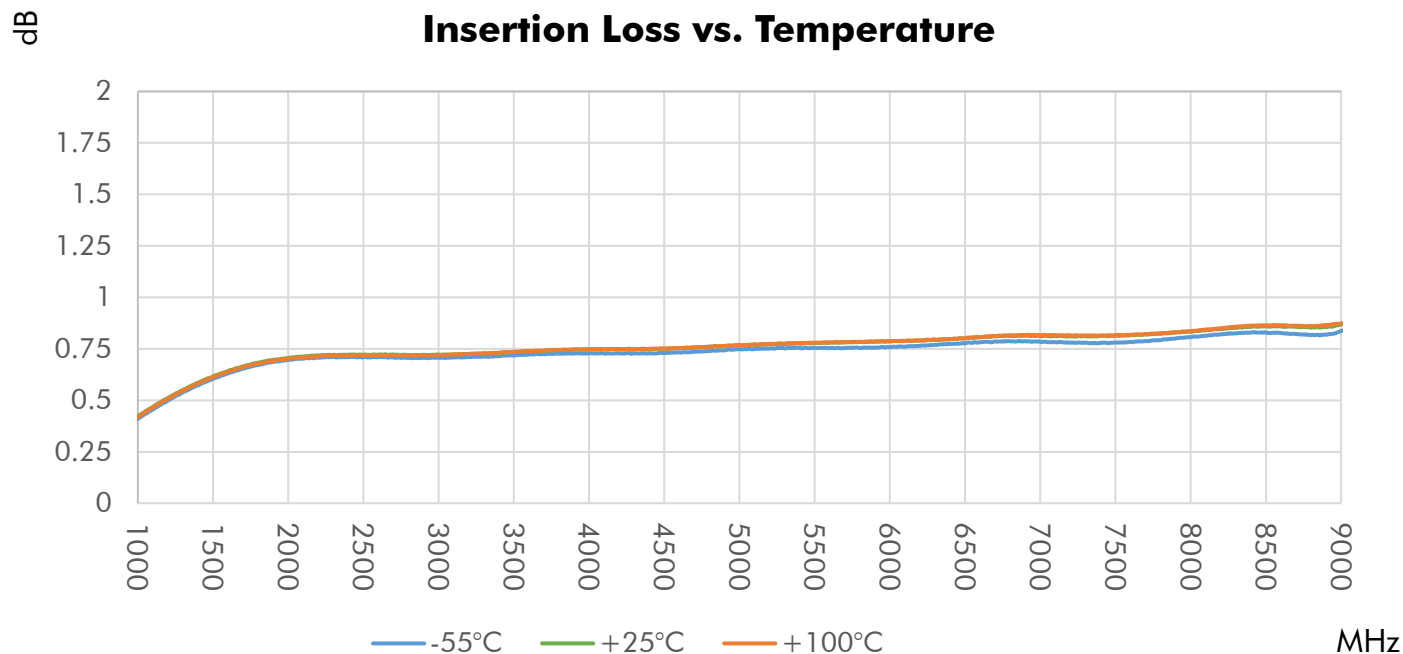
Typical Performance at +25 °C





Typical Performance Over Temperature

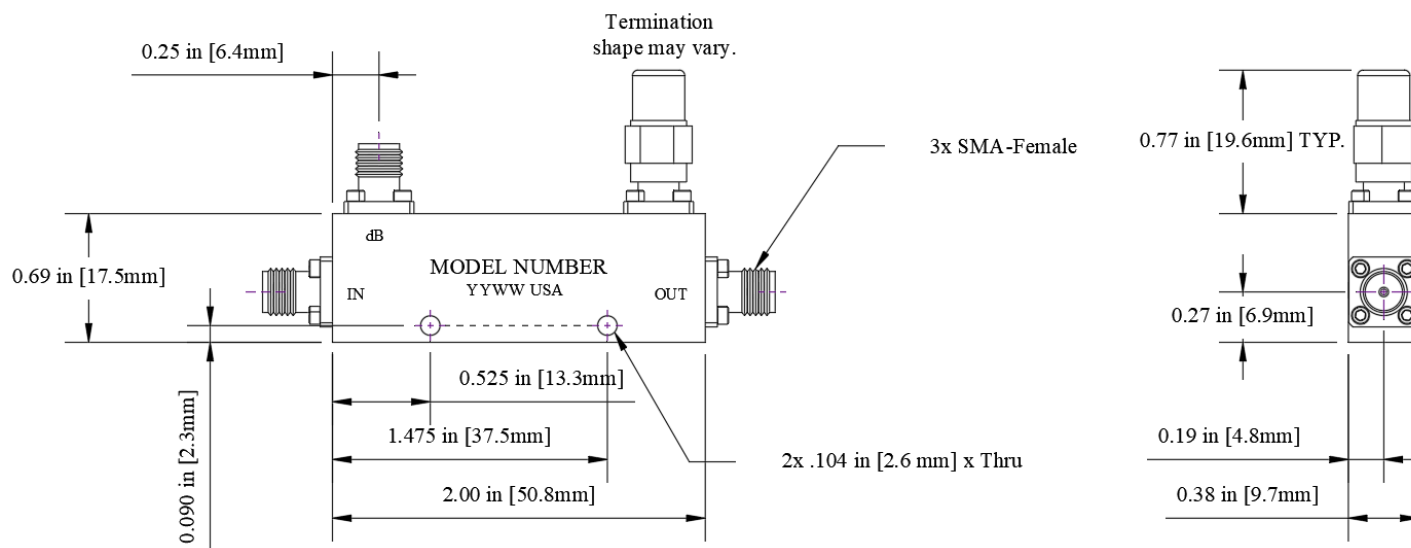




Typical Performance Data

Frequency (MHz)	Return Loss (dB)			Mainline Loss (dB)	Coupling (dB)	Directivity (dB)
	In	Out	Cpl.	In-Out	In-Cpl.	
2000	32.8	33.7	31.2	0.6	10.1	31.8
2250	39.5	38.8	33.8	0.6	10.0	35.5
2500	35.8	37.5	34.9	0.6	10.0	35.7
2750	32.7	31.8	33.4	0.6	10.0	30.0
3000	31.7	29.7	31.0	0.6	10.0	26.7
3250	30.2	29.1	29.5	0.6	10.0	25.4
3500	30.0	31.1	29.0	0.6	9.9	25.9
3750	33.1	36.7	29.6	0.6	9.9	28.1
4000	35.8	51.7	32.4	0.6	9.9	30.9
4250	30.8	34.3	40.6	0.6	9.9	29.0
4500	27.5	29.3	37.0	0.6	9.9	25.6
4750	27.4	28.5	30.5	0.7	10.0	23.6
5000	29.5	29.3	28.4	0.7	9.9	23.0
5250	35.1	31.8	28.2	0.7	9.8	23.6
5500	47.5	36.2	28.5	0.7	9.8	25.0
5750	32.0	34.5	29.3	0.7	9.9	26.6
6000	27.5	29.7	28.5	0.6	9.8	27.4
6250	25.5	27.9	27.3	0.7	9.9	28.1
6500	25.5	27.7	27.1	0.7	9.9	29.7
6750	28.5	28.5	27.6	0.6	9.9	32.2
7000	39.1	33.5	26.8	0.7	9.8	31.7
7250	35.1	37.9	24.5	0.7	10.0	28.1
7500	30.1	31.0	23.1	0.7	9.9	25.8
7750	26.4	26.1	23.3	0.7	9.8	25.4
8000	24.9	24.5	26.4	0.8	9.9	27.0

Outline Dimensions



Outline # OL-1305

Dimensions are in inches, [mm] shown for convenience.

Tolerances on 2-pl decimals: $\pm .03$. 3-pl decimals: $\pm .015$.

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