

August 20, 2018

Notice of Specification Change

Customer:	All	Anaren Order#	All
Customer P/N:	All	Anaren PCN #	305166
Anaren P/N:	X3C09F1-20SR	Qty Affected:	All

Notice of Specification Change(s):

Anaren would like to inform you that a specification change is required for the X3C09F1-20SR. Mean Coupling, Directivity and VSWR are the specific parameters that requires a change. The tables below outline current specifications and updated specifications **(highlighted in Yellow)**.

Current Data Sheet Specifications:

Electrical Specifications **

Frequency	Mean Coupling	Insertion Loss	VSWR	Group Delay (GD-C)
<i>MHz</i>	<i>dB</i>	<i>dB Max</i>	<i>Max : 1</i>	<i>ns</i>
700-1000	20.0 ±1.0	0.075	1.22	0.22±0.04
869-894	20.0 ±0.5	0.050	1.12	0.22±0.04
925-960	20.0 ±0.5	0.050	1.12	0.22±0.04
Group Delay (GD-DC)	Directivity	Power	ΘJC	Operating Temp.
<i>ns</i>	<i>dB Min</i>	<i>Avg. CW Watts @95degC</i>	<i>°C/Watt</i>	<i>°C</i>
0.06±0.015	20	25	118.3	-55 to +140
0.06±0.015	25	25	118.3	-55 to +140
0.06±0.015	25	25	118.3	-55 to +140

Updated Data Sheet Specifications:

Electrical Specifications **

Frequency	Mean Coupling	Insertion Loss	VSWR	Group Delay (GD-C)
<i>MHz</i>	<i>dB</i>	<i>dB Max</i>	<i>Max : 1</i>	<i>ns</i>
700-1000	20.0 ±1.0	0.075	1.22	0.22±0.04
869-894	19.7 ±0.5	0.050	1.22	0.22±0.04
925-960	19.7 ±0.5	0.050	1.22	0.22±0.04
Group Delay (GD-DC)	Directivity	Power	ΘJC	Operating Temp.
<i>ns</i>	<i>dB Min</i>	<i>Avg. CW Watts @95degC</i>	<i>°C/Watt</i>	<i>°C</i>
0.06±0.015	20	25	118.3	-55 to +140
0.06±0.015	20	25	118.3	-55 to +140
0.06±0.015	20	25	118.3	-55 to +140

Justification:

When Anaren originally established the specifications for this part, they were based on estimated projections for material and process stability established during low volume pilot builds. As we have increased production quantities, it has become apparent that these projections were too optimistic. The net result is that this part has had consistently poor yield, despite several attempts at controlling the material and process variables which impact performance. Because of the size constraints inherent in this small part, there are no design options available which would improve the performance without adversely impacting the performance of other parameters. Therefore, our only available option is to update these specifications.

Specification Change Timeline:

The new specification will automatically go into effect **IMMEDIATELY** for any new orders. If you have open orders, Anaren customer service will contact you to check if the customer would prefer to proceed with the open order to this new specification, or to cancel the open order.

To help determine the impact of this change on customer system performance samples are available of units with performance tested to the updated specifications.

Anaren feels that this design improvement and spec change is essential to ensure timely and consistent deliveries.

If you have any questions or need further information, please call me at 1-800-544-2414 or send e-mail to Sarvesh.nair@anaren.com

Sincerely,
Sarvesh Nair
Sr. Project Management Engineer
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