
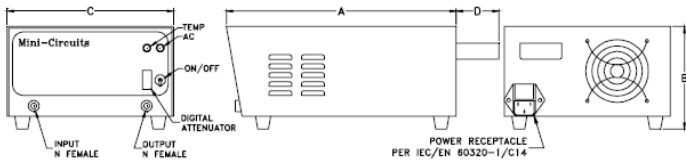

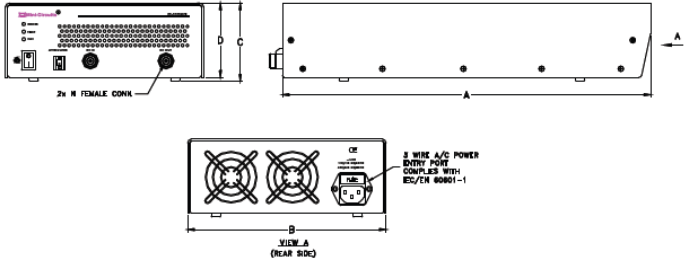


TVA-11-422A+ PCN Report

AN-60-079

As a result of the introduction of RoHS compliant version and assembly option at an alternate qualified Mini-Circuits facility, the replacement part has been judged by the Mini-Circuits Engineering team as a suitable replacement for the existing TVA-11-422_a.

CASE STYLE

ORIGINAL PART: TVA-11-422	REPLACEMENT PART: TVA-11-422A+																														
<p>CASE STYLE: AP1603</p>  <p>Outline Drawing</p>  <p>Outline Dimensions (inch/mm)</p> <table border="1"> <thead> <tr> <th>A</th> <th>B</th> <th>C</th> <th>D</th> <th>wt</th> </tr> </thead> <tbody> <tr> <td>10.8</td> <td>4.8</td> <td>7.8</td> <td>2.00</td> <td>grams</td> </tr> <tr> <td>274.3</td> <td>121.9</td> <td>198.1</td> <td>50.8</td> <td>3000</td> </tr> </tbody> </table>	A	B	C	D	wt	10.8	4.8	7.8	2.00	grams	274.3	121.9	198.1	50.8	3000	<p>CASE STYLE: PJ2059-1</p>  <p>Outline Drawing</p>  <p>Outline Dimensions (inch/mm)</p> <table border="1"> <thead> <tr> <th>A</th> <th>B</th> <th>C</th> <th>D</th> <th>WT.</th> </tr> </thead> <tbody> <tr> <td>15.35</td> <td>8.27</td> <td>3.25</td> <td>3.09</td> <td>GRAM</td> </tr> <tr> <td>389.89</td> <td>210.06</td> <td>82.55</td> <td>78.49</td> <td>3550</td> </tr> </tbody> </table>	A	B	C	D	WT.	15.35	8.27	3.25	3.09	GRAM	389.89	210.06	82.55	78.49	3550
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- a. Suitability within a particular system must be determined by and is solely the responsibility of the customer based on, among other things, electrical performance criteria, stimulus conditions, application, compatibility with other components and environmental conditions and stresses.

CONCLUSION:

- 1) FIT and FORM change for RoHS version
- 2) FUNCTIONAL changes as follows:

Parameter	Original Part, TVA-11-422	Replacement Part, TVA-11-422A+
Gain	36dB min, 42dB typ	35dB min, 39dB typ
Gain Flatness	+/-1dB typ, +/-1.5dB max	+/-1.3dB typ
Input VSWR	1.35:1 typ	1.7:1 typ
Output VSWR	1.7:1 typ	1.8:1 typ
P1dB	28dBm min*, 30dBm typ *27dBm at 10-700MHz	28dBm min**, 30dBm typ **26dBm at 3600-4200MHz
OIP3	44dBm typ	40dBm typ

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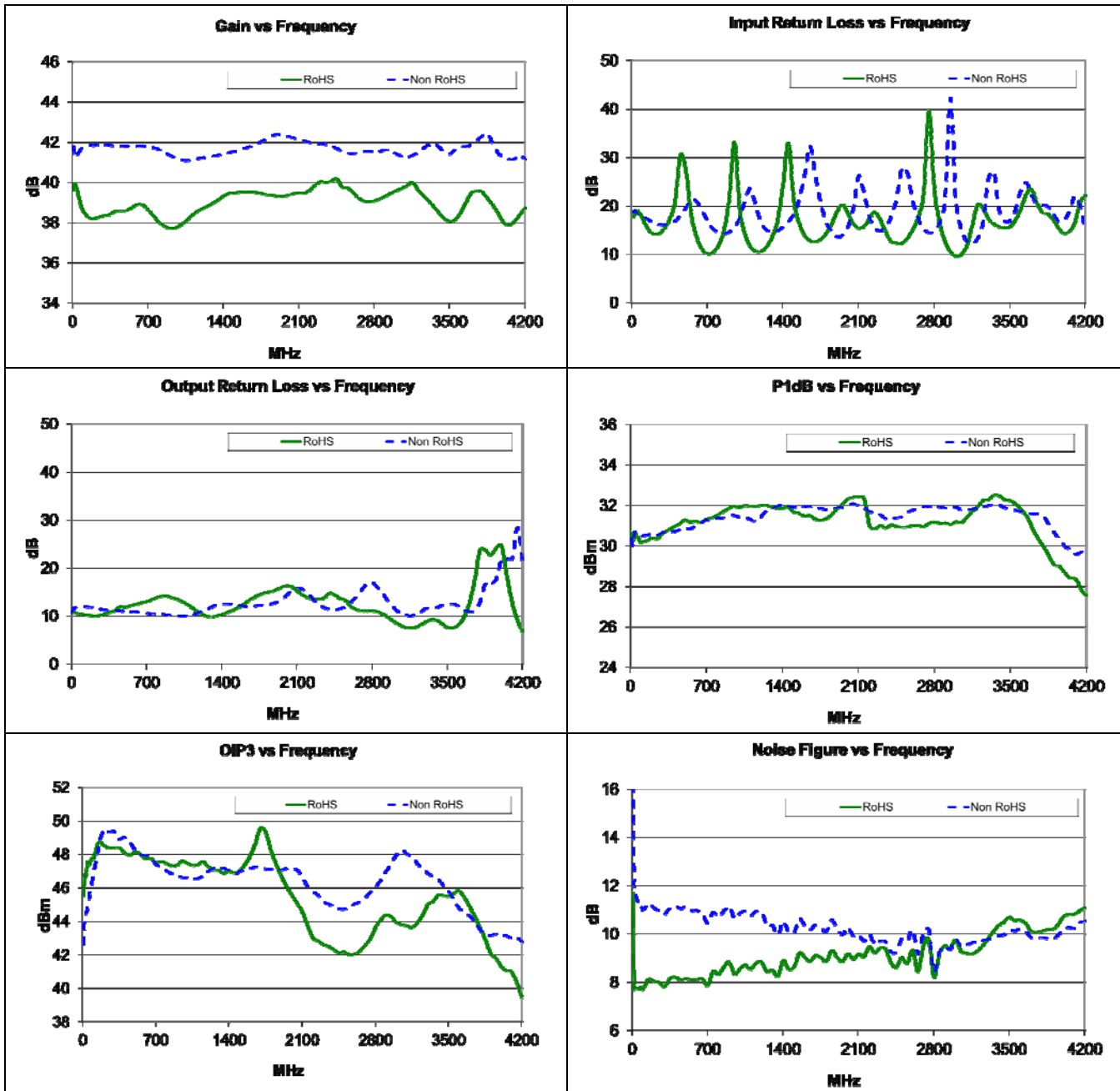
3) TYPICAL PERFORMANCE COMPARISON_a: T_{AMB}=25°C

Parameter	Freq (MHz)	Non RoHS (TVA-11-422)		RoHS (TVA-11-422A+)	
		Data of 1 unit		Data of 2 units	
		Min	Max	Min	Max
Gain (dB)	10-4200	41.11	42.39	37.61	40.17
Gain Flatness (dB)	10-4200	-----	+/-0.64	-----	+/-1.28
Input VSWR (:1)	10-4200	-----	1.56	-----	2.53
Output VSWR (:1)	10-4200	-----	1.92	-----	2.72
P1dB (dBm)	10-3600	30.36	-----	30.04	-----
	3600-4200	29.68	-----	27.53	-----
OIP3 (dBm)	10-4200	42.63	-----	38.47	-----
Noise Figure (dB)	10-4200	-----	16.18	-----	12.7
AC Supply (V)	-----	-----	110/220	-----	110/220

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COMPARISON PERFORMANCE CURVES^a:

T_{AMB}=25°C



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