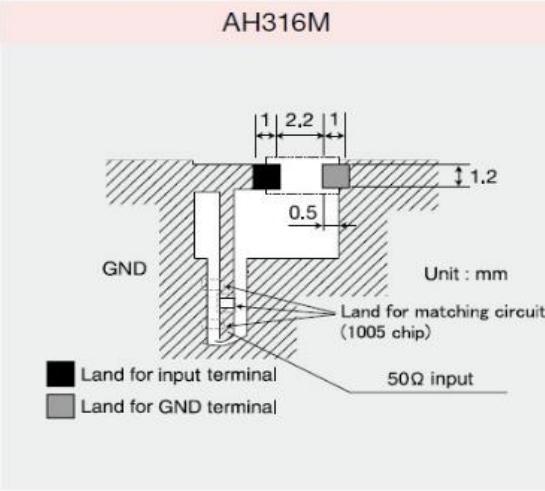
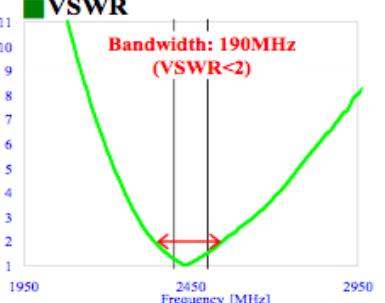
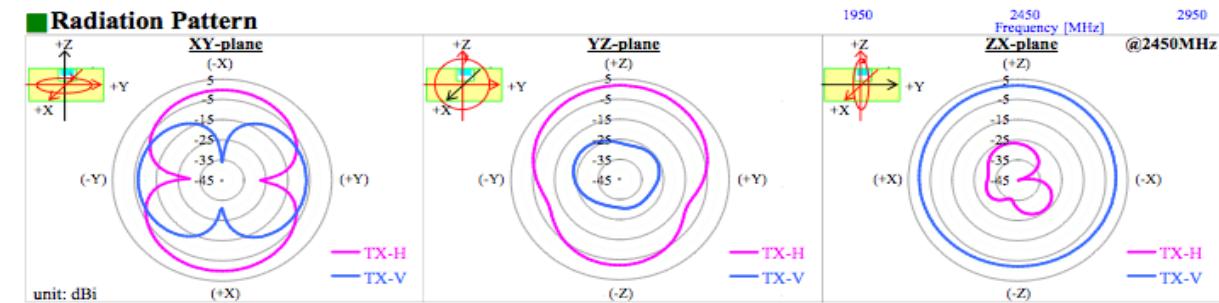


No.	Company	Parts No.	Frequency	Peak Gain	Connection																																														
1	Taiyo Yuden Co., Ltd.	TSA5NA2K2G45NS001T /AH316M245001	2.4GHz	1.9dBi	SMT																																														
Address: yobashi, Chuo-ku, ,2-7-19 Tokyo 104-0031, Japan																																																			
 <b>AH316M</b>  <p>Unit : mm</p> <p>Legend:  ■ Land for input terminal  ■ Land for GND terminal</p>		<p><b>2.4GHz Multilayer RadiEdge Antenna (for Bluetooth®, W-LAN)</b></p> <p><b>AH 316M245001</b></p> <p>Date: Sep/01/2011</p> <p><b>Feature</b></p> <ul style="list-style-type: none"> <li>* Ultra Small</li> <li>* Low Profile</li> <li>* High Performance</li> <li>* Small Keep-out Area</li> </ul> <p><b>Actual data</b></p> <table border="1"> <tr> <td>Efficiency : -1.3dB ( 73%)</td> <td>Peak Gain : 1.9dBi @2450MHz</td> </tr> <tr> <td>Average Gain : 0.0dBi (ZX plane-Vertical polarization)</td> <td></td> </tr> </table> <p><b>Electrical Characteristics</b></p> <table border="1"> <thead> <tr> <th></th> <th>2400MHz</th> <th>2450MHz</th> <th>2500MHz</th> </tr> </thead> <tbody> <tr> <td>Efficiency [dB]</td> <td>-1.4 ( 73%)</td> <td>-1.3 ( 73%)</td> <td>-1.4 ( 73%)</td> </tr> <tr> <td>Peak gain [dBi]</td> <td>1.9</td> <td>1.9</td> <td>1.6</td> </tr> <tr> <td>Average gain [dBi]</td> <td> <table border="1"> <tr> <td>XY-plane</td> <td>TX-H</td> <td>-3.1</td> <td>-3.2</td> <td>-3.0</td> </tr> <tr> <td></td> <td>TX-V</td> <td>-9.4</td> <td>-9.7</td> <td>-10.4</td> </tr> <tr> <td>YZ-plane</td> <td>TX-H</td> <td>-2.1</td> <td>-2.1</td> <td>-2.3</td> </tr> <tr> <td></td> <td>TX-V</td> <td>-26.8</td> <td>-26.3</td> <td>-25.4</td> </tr> <tr> <td>ZX-plane</td> <td>TX-H</td> <td>-29.2</td> <td>-29.2</td> <td>-27.9</td> </tr> <tr> <td></td> <td>TX-V</td> <td>-0.1</td> <td>0.0</td> <td>0.0</td> </tr> </table> </td> </tr> </tbody> </table> <p><b>VSWR</b></p>  <p>Bandwidth: 190MHz (VSWR&lt;2)</p> <p>Frequency [MHz] @2450MHz</p> <p><b>Radiation Pattern</b></p>  <p>unit: dBi</p> <p>TAIYO YUDEN</p> <p><a href="http://www.ty-top.com">http://www.ty-top.com</a></p>		Efficiency : -1.3dB ( 73%)	Peak Gain : 1.9dBi @2450MHz	Average Gain : 0.0dBi (ZX plane-Vertical polarization)			2400MHz	2450MHz	2500MHz	Efficiency [dB]	-1.4 ( 73%)	-1.3 ( 73%)	-1.4 ( 73%)	Peak gain [dBi]	1.9	1.9	1.6	Average gain [dBi]	<table border="1"> <tr> <td>XY-plane</td> <td>TX-H</td> <td>-3.1</td> <td>-3.2</td> <td>-3.0</td> </tr> <tr> <td></td> <td>TX-V</td> <td>-9.4</td> <td>-9.7</td> <td>-10.4</td> </tr> <tr> <td>YZ-plane</td> <td>TX-H</td> <td>-2.1</td> <td>-2.1</td> <td>-2.3</td> </tr> <tr> <td></td> <td>TX-V</td> <td>-26.8</td> <td>-26.3</td> <td>-25.4</td> </tr> <tr> <td>ZX-plane</td> <td>TX-H</td> <td>-29.2</td> <td>-29.2</td> <td>-27.9</td> </tr> <tr> <td></td> <td>TX-V</td> <td>-0.1</td> <td>0.0</td> <td>0.0</td> </tr> </table>	XY-plane	TX-H	-3.1	-3.2	-3.0		TX-V	-9.4	-9.7	-10.4	YZ-plane	TX-H	-2.1	-2.1	-2.3		TX-V	-26.8	-26.3	-25.4	ZX-plane	TX-H	-29.2	-29.2	-27.9		TX-V	-0.1	0.0	0.0
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The data is reference only. Electrical characteristics vary depending on environment or measurement condition.

TAIYO YUDEN reserves the right to make change to the Date at any time without notice.

Before making final selection, please check product specification