R8U3NA1302Z Specification

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# PANASONIC AVIONICS

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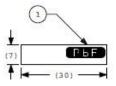
- Assembly Drawing
- RF Characteristics

# **Assembly Drawing**

- 1. REFERENCE DRAWINGS: SCHEMATIC: DC-NA1302-3 FABRICATION: R5UG867Z
- WORKMANSHIP TO BE EQUAL TO AND COMPLIANT WITH THE REQUIREMENTS OF IPC-A-610, CLASS 2.

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- ASSEMBLY CONTAINS ELECTROSTATIC DISCHARGE (ESD) SENSITIVE DEVICES. STATIC-FREE HANDLING IS REQUIRED PER MIL-STD-1696, CLASS 2.
- REFERENCE DESIGNATIONS ARE FOR COMPONENT IDENTIFICATION/LOCATION ONLY AND MAY NOT APPEAR ON ACTUAL PART.
- 5. SQUARE PAD AND/OR DOT IDENTIFIES PIN #1 LOCATION AND DEVICE ORIENTATION WHEN VIEWED FROM THE TOP. ORIENTATION OF POLARIZED CAPACITORS IS DENOTED BY A PLUS (+) SIGN. POLARITY IS IDENTIFIED ON THE PART.
- 6. LEAD-FREE SOLDER SHALL BE USED IAW J-STD-001, CLASS 2.
- TERMINATE ALL SOLDERED THROUGH-HOLE COMPONENT LEADS TO A MAXIMUM HEIGHT OF 1.5 FROM THE PLATING SURFACE.
- 8. BAG AND TAG FINISHED ASSEMBLY WITH PART NUMBER AND LATEST REVISION.
- 9. NO CONFORMAL COAT REQUIRED.

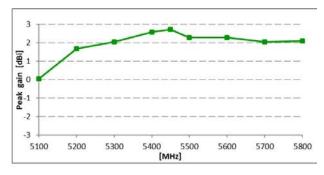




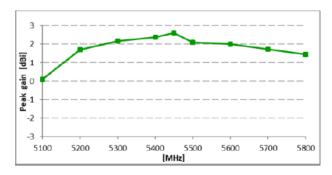


### **RF Characteristics**

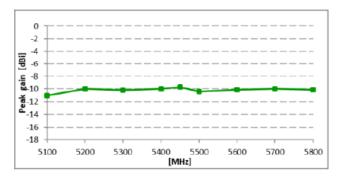
Items	Specifications	Notes
Manufacturer	Panasonic	
Part Number	R8U3NA1302**	** is for revision (ZA, YB and etc.)
Peak Gain	1.70dBi at 5.2GHz 2.18dBi at 5.3GHz 2.73dBi at 5.45GHz 2.27dBi at 5.6GHz	<ul><li>Not designed for 2.4GHz</li><li>Peak gain at 5.45GHz</li></ul>
Antenna Type	PCB	
Antenna Polarization	Horizontal	



Peak Gain[dBi] (XY-Plane, H Polarization )

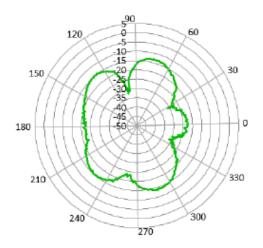


Peak Gain[dBi] (XZ-Plane, H Polarization)

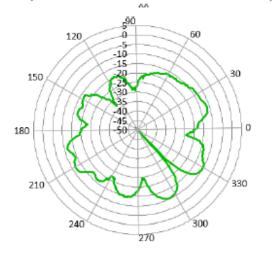


Peak Gain[dBi] (YZ-Plane, H Polarization)

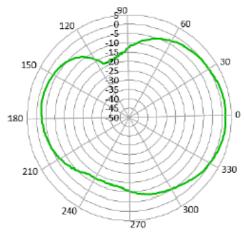
## Radiation pattern at 5.3GHz



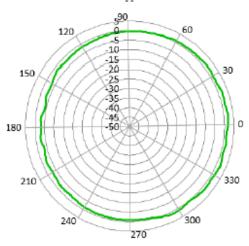
Radiation Pattern[dBi] (XY-Plane, V Polarization )



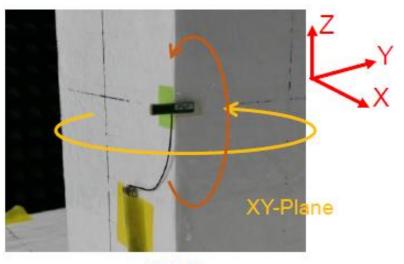
Radiation Pattern[dBi] (XZ-Plane, V Polarization )



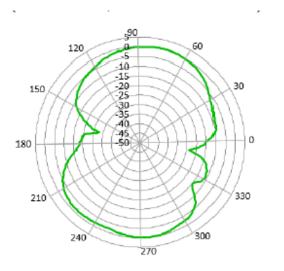
Radiation Pattern[dBi] (XY-Plane, H Polarization )



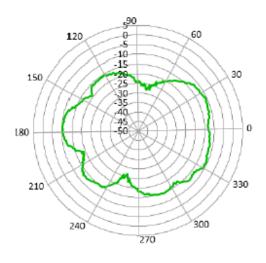
Radiation Pattern[dBi] (XZ-Plane, H Polarization )



XZ-Plane



Radiation Pattern[dBi] (YZ-Plane, V Polarization )



Radiation Pattern[dBi] (YZ-Plane, H Polarization)

#### **Panasonic**

# THANK YOU

Appendix: RF Cable Panasonic

#### **RF Cable**

Manufacturer	IPEX	
Part Number	R8S2NA1302ZA R8S3NA1302ZA	
Length	R8S2NA1302ZA (121mm) R8S3NA1302ZA (295mm)	
Connector	MHF 4L Ni- TOP (I-PEX)	

Cable Material Characterization by Panasonic

L=100mm:-0.6dB@5600MHz

L=150mm:-0.84dB@5600MH

#### **Internal Connection**

