

Chip Antenna SATCA-3C1GF-WFB8 3.2mm x 1.6mm x 0.5mm

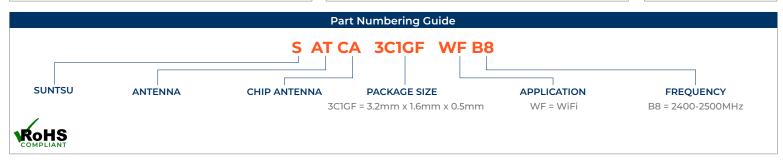
Features

- WiFi/ZigBee/Bluetooth
- Chip Type
- Stable And Reliable Performance
- 2400-2500MHz
- SMT Process Compatible

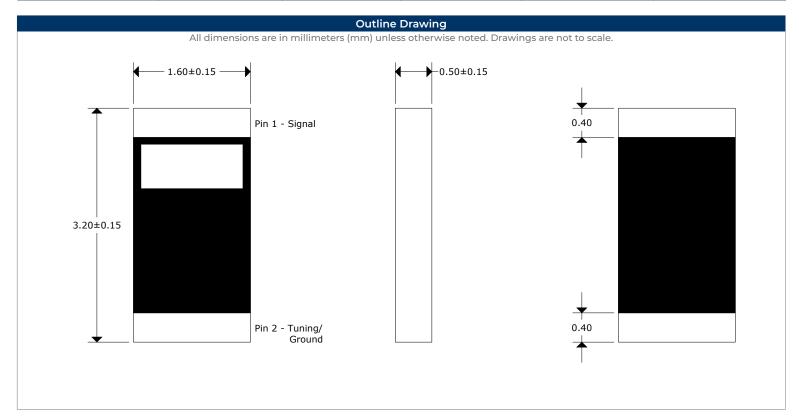
Applications

- ISM 2.4 GHz Applications
- ZigBee/BLE Applications
- Bluetooth Earphone Systems
- Smart Hand Held Devices
- Wireless PCMCIA Cards or USB Dongles



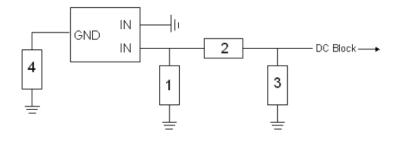


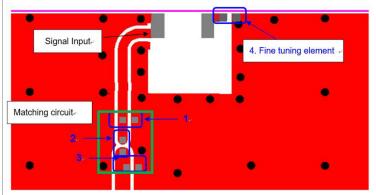
Electrical Parameters	Units	Minimum	Typical	Maximum	Remarks
Frequency Band	MHz	2400		2500	
Impedance	Ω		50		
Polarization			Linear		
Peak Gain	dBi		2.5		At 2442MHz
Efficiency	%		84		At 2442MHz
VSWR				2	At Center Frequency
Operating Temperature	С	-40		85	





Recommended Land Pattern & Frequency Tuning Scenario Circuit All dimensions are in millimeters (mm) unless otherwise noted. Drawings are not to scale. Grounding Pin Signal Input. 5.5 5.3 Top View Transmission Line with 50Ω Impedance Characteristic





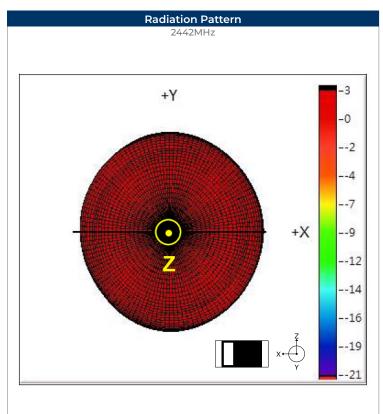
System Matching Circuit Components					
Location	Description	Vendor	Tolerance		
1	1.2pF	DARFON (0402)	±0.1pF		
2	3.3nH	DARFON (0402)	±0.1nH		
3	N/A	-	-		
4 Fine Tuning Element	1.5pF	DARFON (0402)	±0.1pF		

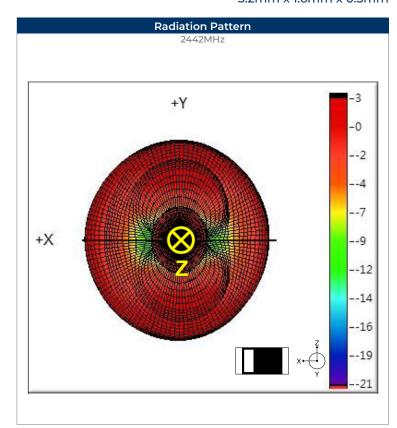
For these suggested values for the matching and tuning of components the center frequency will be 2442MHz on a standard 80 x 40mm² Evaluation board.

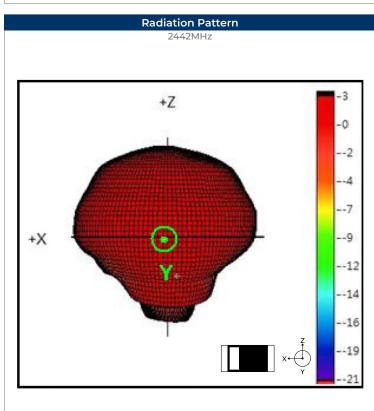
Please note, these are reference values which may need to be changed when different circuit boards or manufactures are used.

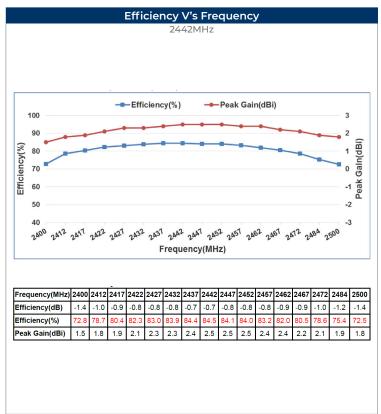
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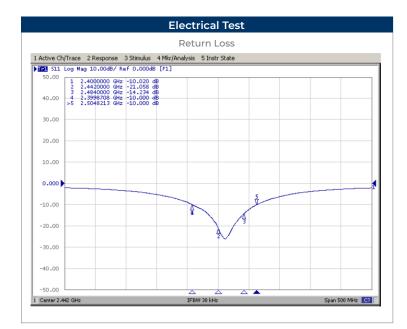


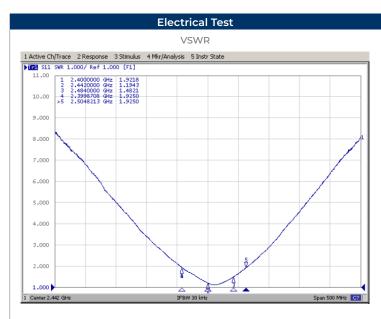


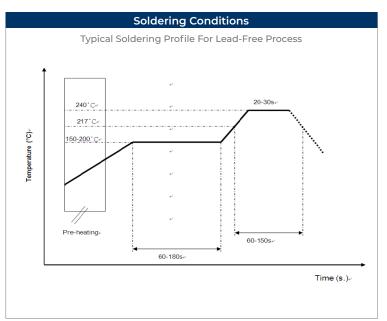


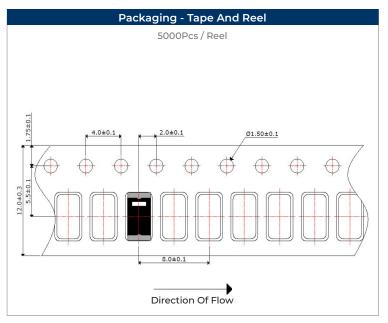












Environmental & Mechanical Specifications				
High Temperature Test	85°C for 500 hours, and then to normal temperature/humidity for 24hours.			
Low Temperature Test	-30°C for 500 hours, and then to normal temperature/humidity for 24hours.			
Humidity Test	85°C / 90-95%RH for 96 hours, and then to normal temperature/humidity for 24hours.			
Thermal Shock Test	-30°C for 30 min and +85°C for 30 min. 5 cycles, then expose to normal temperature/humidity for 24 hours or more.			
Vibration Test	5 to 200 to 5Hz, swept in 10min, 4.5G at max(2mm amplitude), in X and Y directions for 2 hours each and in Z direction for 4 hours.			