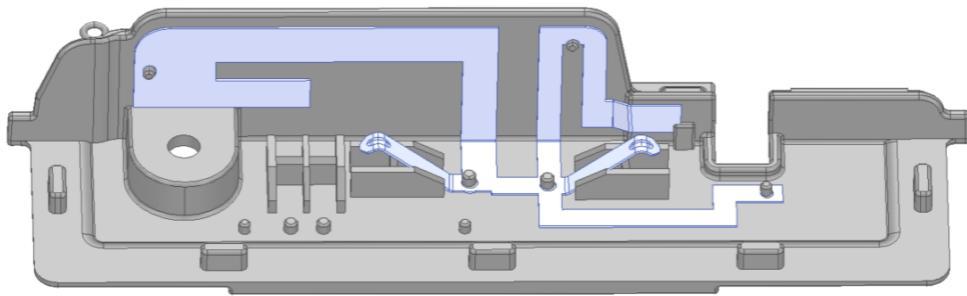


Document	Datasheet
Type	Carrier & Metal stamped type
Application	5G Sub-6
Part No.	AMO-MHA-LG002
Revision	0

DATASHEET



Application

5G Sub-6 Antenna (617 ~ 960MHz, 1710 ~ 5000MHz)

Features

Carrier & Metal stamped assembly type
82.4*21.0*15.9 mm³
RoHS Compliant

AMOTECH

Notes

The contents of this datasheet are subject to change without notice. Please confirm the specifications and delivery conditions when placing your order.

Revision History

Rev. No	Date	Title	Contents	Page
0	'24.12.28		New Published	

Table of Content

1. Specifications	3
1.1 Electrical Specifications	
1.2 Mechanical Specifications	
1.3 Description of Part Number	
2. Measurement Result	4
2.1 VSWR & Return-loss (Air Condition)	
2.2 Antenna Gain	5
3. Reliability	6

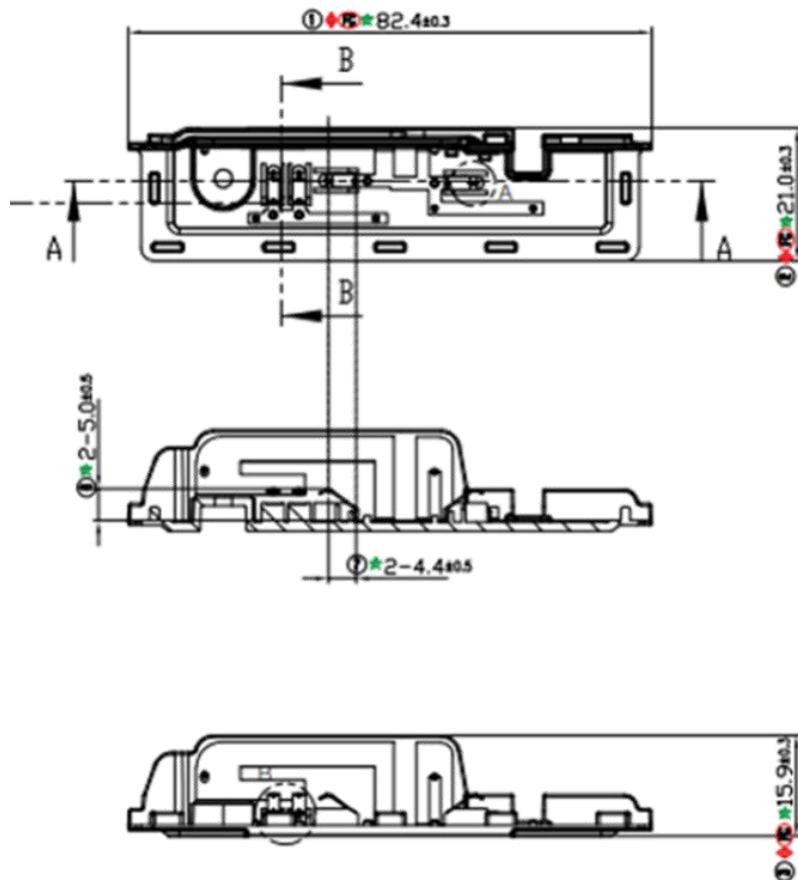
1. Specifications

1.1 Electrical Specifications

No	Item	Spec.	Remark
1	Mean-mean	typically -10.62 dBi	Measured data
2	Min-mean	Typically -14.94 dBi	
3	Peak Gain	Typically 4.80 dBi	
4	Radiation Pattern	Omni-directional	
5	Impedance	Normal 50 Ω	

1.2 Mechanical Specifications

No	Part	Specification
1	Injection Carrier	82.4*21*15.9 (1.7T), PC+GF20%
2	Press Antenna	47.6*10.9*13.5 (0.3T), STS301, 락 도금



1.3 Description of Part Number

P/N : $\frac{\text{AMO}}{(1)}$ $\frac{\text{MHA}}{(2)}$ $\frac{\text{LG002}}{(3)}$

(1) : AMOTECH

(2) : Carrier & Metal stamped Antenna

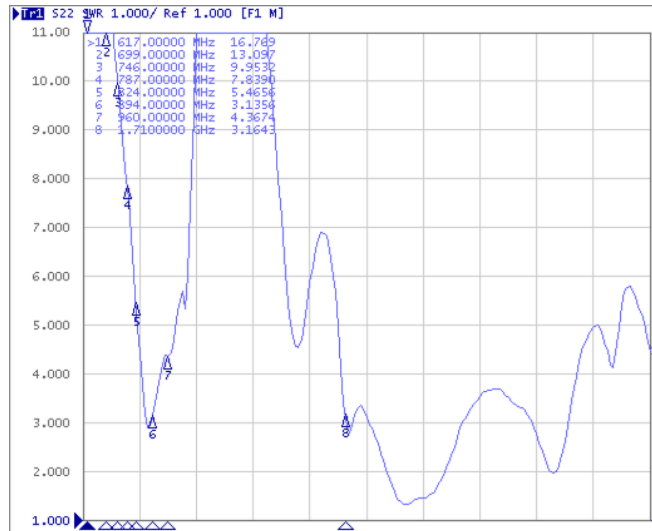
(3) : Product serial number

2. Measurement Result

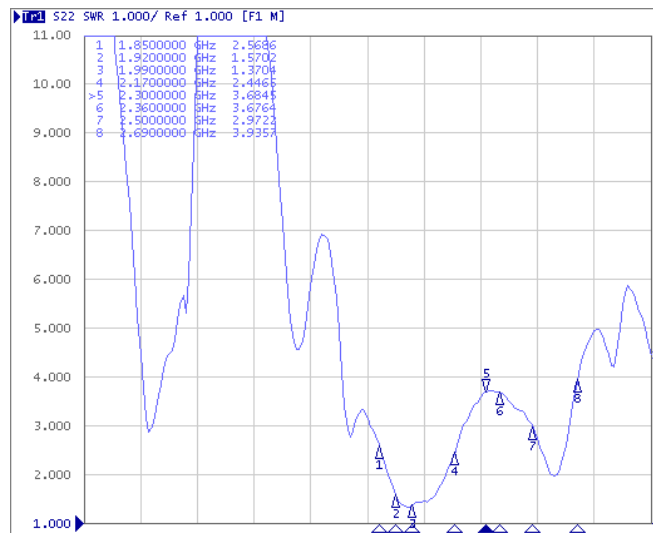
2.1 Return-loss & VSWR

Measurement condition : Air Condition

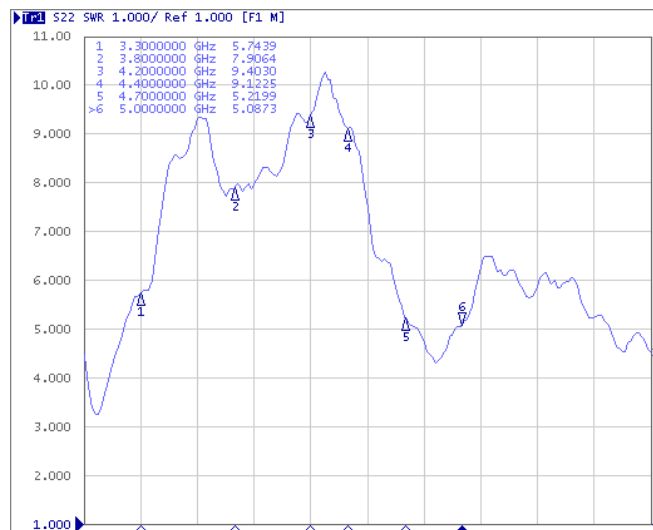
VSWR_ Low



VSWR_ Middle

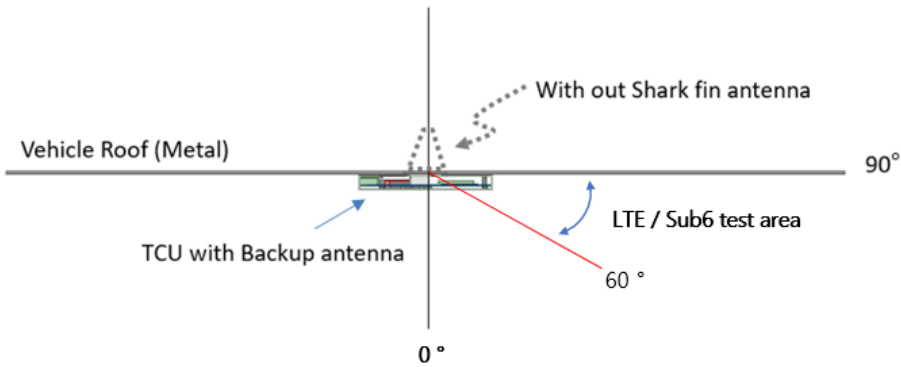


VSWR_ High



2.2 Antenna Gain

Measurement condition : Air Condition



Frequency [MHz]	Mean-Mean [dBi]	Min-Mean [dBi]	Peak gain [dBi]
617	-22.18	-24.40	-17.47
699	-19.27	-20.64	-14.83
746	-18.09	-20.50	-12.91
787	-17.96	-21.72	-11.63
824	-10.93	-15.22	-6.03
894	-9.95	-14.11	-4.90
960	-10.31	-14.66	-3.79
1710	-6.61	-10.79	0.43
1850	-5.80	-8.61	0.41
1920	-5.05	-8.26	2.19
1990	-4.80	-8.65	1.73
2170	-6.34	-10.20	-0.35
2300	-6.70	-9.45	-0.05
2360	-6.21	-9.30	0.77
2500	-5.84	-9.23	0.40
2690	-6.82	-10.23	-2.49
3300	-12.14	-16.09	-5.57
3800	-16.38	-20.49	-9.83
4200	-18.10	-22.81	-11.42
4400	-16.79	-21.90	-10.18
4700	-11.36	-15.62	-4.69
5000	-11.08	-15.49	-5.30

3. Reliability

NO	ITEM	Test Condition	Test Requirements
1	Resistance to Solvents	Dipping Glass Cleaner , Time: 2Hr	1. No visual damage
2	High Temperature Exposure	Temperature: +125 °C, Time: 1000 Hr	1. No visual damage 2. Within electrical spec (VSWR)
3	Low Temperature Exposure	Temperature: -40 °C , Time: 1000 Hr	1. No visual damage 2. Within electrical spec (VSWR)
4	Thermal shock	-55 °C/30min ↔ 125 °C/30min, 1000 Cycle	1. No visual damage 2. Within electrical spec (VSWR)
5	High Temperature & High Humidity Exposure	Humidity: 85%RH, Temperature: 85 °C, Time: 1000 Hr	1. No visual damage 2. Within electrical spec (VSWR)
6	Mechanical Shock	Peak value100g's, Duration 6 ms, Three axis, 3times ※MIL-STD-202 METHOD 213 Condition C	1. No visual damage 2. Within electrical spec (VSWR)
7	Vibration	5-55-5Hz, 1 Octave/min, Amp.=1.5mm, acceleration=2g, Crossover Freq.=18Hz	1. No visual damage 2. Within electrical spec (VSWR)
8	PCT (Pressure Cooker Test)	1. Temperature: 120 °C, Relative Humidity: 100 %, Atmosphere Pressure: 2 Kg/cm ² 2. Time: 4 hrs	1. No visual damage 2. Within electrical spec (VSWR)
9	ESD	ESD level : 8KV, Mode : Contact discharge, 100 times	1. No visual damage 2. Within electrical spec (VSWR)
10	High Temperature High Humidity Exposure	1. Humidity : 90 % RH 2. Temperature : +60 °C 3. Time : 96 hrs.	1. No visual damage 2. Within electrical spec (VSWR)