# mail

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



# Contact us

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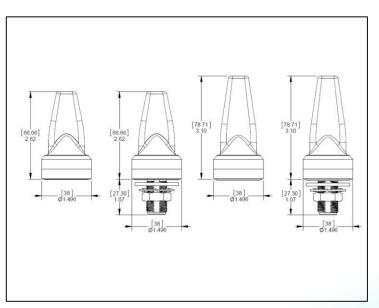


Series: IceFin

TECHNICAL DATA SHEET Description: LOW PROFILE MULTIBAND ANTENNA

# PART NUMBER: ICEFINXXX





#### All dimensions are in mm / inches

#### Issue: 1706

For more information:

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# Features:

- Transparent clear visually appealing plastic radome
- Short, slim profile without sacrificing RF or mechanical performance
- Direct and NMO mount models
- · IP67 Weatherproof

# **Applications:**

- · Models supporting :
  - Public Safety, LMR
  - Wi-Fi,
  - 3G/4G LTE,
  - ISM
  - DSRC
- Bus/Rail/Transit
- IoT Vending, metering and other industrial applications
- Outdoor Vehicular



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TECHNICAL DATA SHEET Description: LOW PROFILE MULTIBAND ANTENNA

Series: IceFin

# PART NUMBER: ICEFINXXX

This document covers all product variants of the following product family:

Project	Color	Frequency	Size	Fixing System Connector	
ICEFINLNMOHF	Clarity	698-960MHz 1710-2700MHz	78.71] 3.10 [38] Ø1.496	NMOHF NMO + HF Connector	
ICEFIN806NMO	Clarity	806-960MHz		NMO Pogo Pin Connector	
ICEFIN698/869DMN	Clarity	698-869MHz	[78.71] 3.10 [27.30] 1.07 [27.30] (38.] (38.] (51.496		
ICEFIN806DMN	Clarity	806-960MHz			
ICEFINLDMN	Clarity	698-960MHz 1710-2700MHz		DMN Direct Mount + N Female Connector (Screw 5/18-24 UNEF 2A)	

Issue: 1706

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TECHNICAL DATA SHEET Description: LOW PROFILE MULTIBAND ANTENNA

# Series: IceFin

# PART NUMBER: ICEFINXXX

This document covers all product variants of the following product family:

Project	Color	Frequency	Size	Fixing System Connector	
ICEFIN24NMOHF	Clarity	2400-2500MHz			
ICEFIN49NMOHF	Clarity	4900-6000MHz			
ICEFINWNMOHF	Clarity	2400-2500MHz 4900-6000MHz	[38] Ø1.496	NMOHF NMO + HF Connector	
ICEFIN24DMN	Clarity	2400-2500MHz			
ICEFIN49DMN	Clarity	4900-6000MHz			
ICEFINWDMN	Clarity	2400-2500MHz 4900-6000MHz	[27.30] 1.07 [38] 01.496	Direct Mount N Female Connector (Screw 5/18-24 UNEF 2A)	

P.S.: For DMN fixing system, it requires a 5/8" (16mm) hole in the mounting surface.

Remove any burrs, particularly on the Roof under side of the hole. Remove paint in a narrow ring around the hole. Metal-to-metal contact between the mounting surface and mount is essential for best performance.

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Description: LOW PROFILE MULTIBAND ANTENNA

# Series: IceFin

### PART NUMBER: ICEFINXXX

ELECTRICAL SPECIFICATIONS					
Project	Frequency	VSWR	Peak Gain	Efficiency	Power Handling
ICEFINLNMOHF	698-960MHz 1710-2700MHz	3:1(0.698-0.96GHz) 2:1(1.71-2.7GHz)	2.98dBi(0.698-0.96GHz) 3.82dBi(1.71-2.69GHz)	75% 61%	20W(100% duty cycle)
					30W(50% duty cycle)
ICEFIN806NMO	806-960MHz	2:1	2.91dBi	63%	30W(100% duty cycle) 40W(50%
					duty cycle) 5W(100%
ICEFIN698/869DMN	698-869MHz	2:1	2.6dBi	54%	duty cycle) 15W(50% duty cycle)
ICEFIN806DMN	806-960MHz	2:1	3.7dBi	78%	10W(100% duty cycle) 20W(50% duty cycle)
ICEFINLDMN	698-960MHz 1710-2700MHz	3:1(0.698-0.96GHz) 2:1(1.71-2.7GHz)	3.1dBi(0.698-0.96GHz) 5.17dBi(1.71-2.69GHz)	76% 79%	20W(100% duty cycle) 30W(50% duty cycle)

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Description: LOW PROFILE MULTIBAND ANTENNA

# Series: IceFin

### PART NUMBER: ICEFINXXX

# ELECTRICAL SPECIFICATIONS

Project	Frequency	VSWR	Peak Gain	Efficiency	Power Handling
					20W(100% duty cycle)
ICEFIN24NMOHF	2400-2500MHz	2:1	5.2dBi	88%	
					30W(50% duty cycle)
ICEFIN49NMOHF	4900-6000MHz	2:1	6.2dBi	66%	20W((100% duty cycle)
					30W(50% duty cycle)
					20W(100% duty cycle)
ICEFINWNMOHF	2400-2500MHz	2:1(2.4-2.5GHz)	5.2dBi	88%	
	4900-6000MHz	2:1(4.9-6GHz)	6.2dBi	66%	30W(50% duty cycle)
ICEFIN24DMN	2400-2500MHz	2:1	5.2dBi	88%	20W(100% duty cycle)
					30W(50% duty cycle)
					20W(100% duty cycle)
ICEFIN49DMN	4900-6000MHz	2:1	6.2dBi	66%	
					30W(50% duty cycle)
					20W(100% duty cycle)
	2400-2500MHz	2:1(2.4-2.5GHz)	5.2dBi	88%	
ICEFINWDMN	4900-6000MHz	2:1(4.9-6GHz)	6.2dBi	66%	30W(50% duty cycle)
Nominal Im	pedance			50Ω	

Radiation Pattern

Polarization:

omni

Vertical

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TECHNICAL DATA SHEET Description: LOW PROFILE MULTIBAND ANTENNA

# **Series: IceFin**

### PART NUMBER: ICEFINXXX

MECHANICAL SPECIFICATIONS				
Plastic radome	PC			
Color	Clarity			
Ingress Protection	IP67			

# **ENVIRONMENTAL SPECIFICATIONS**

Operating temperature

-40 ~ +85° C

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Description: LOW PROFILE MULTIBAND ANTENNA

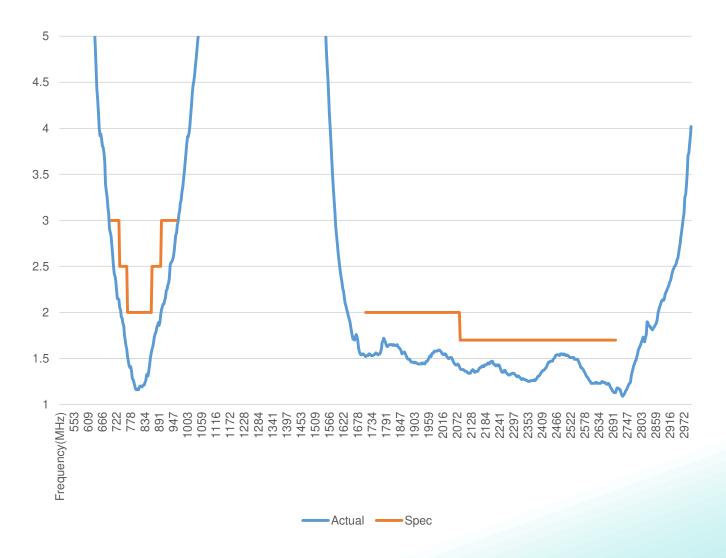
Series: IceFin

PART NUMBER: ICEFINXXX

CHARTS

# **VSWR**

ICEFINLNMOHF VSWR



#### Issue: 1706

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Description: LOW PROFILE MULTIBAND ANTENNA

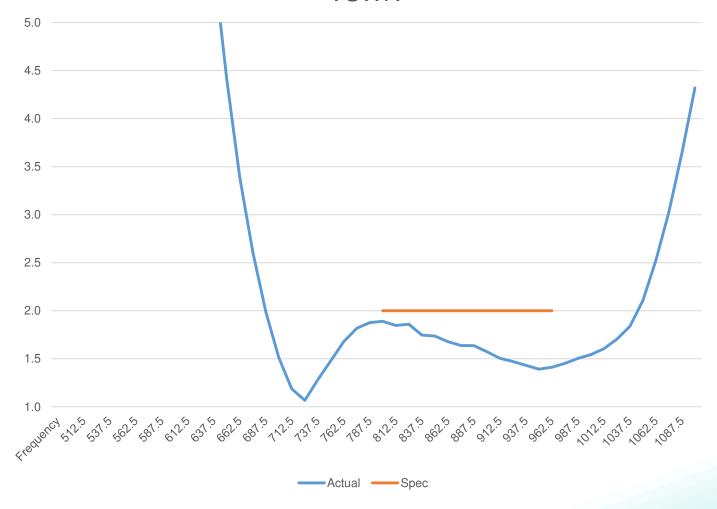
Series: IceFin

### PART NUMBER: ICEFINXXX

**CHARTS** 

# **VSWR**

ICEFIN806NMO VSWR



#### Issue: 1706

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Description: LOW PROFILE MULTIBAND ANTENNA

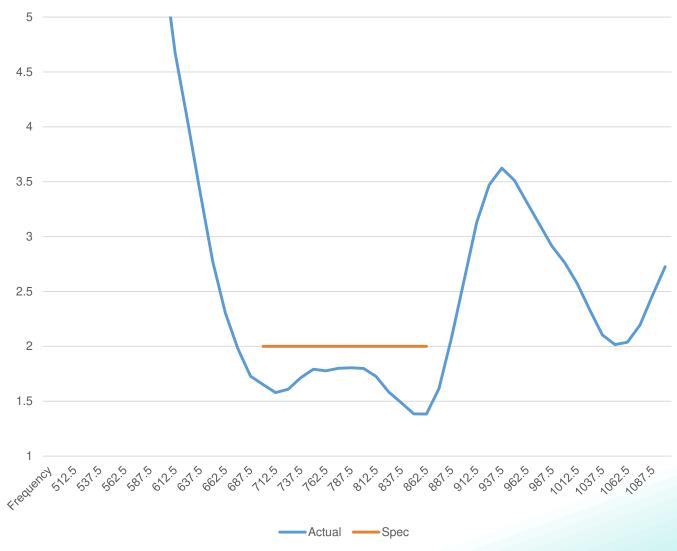
Series: IceFin

### PART NUMBER: ICEFINXXX

**CHARTS** 

# **VSWR**





#### Issue: 1706

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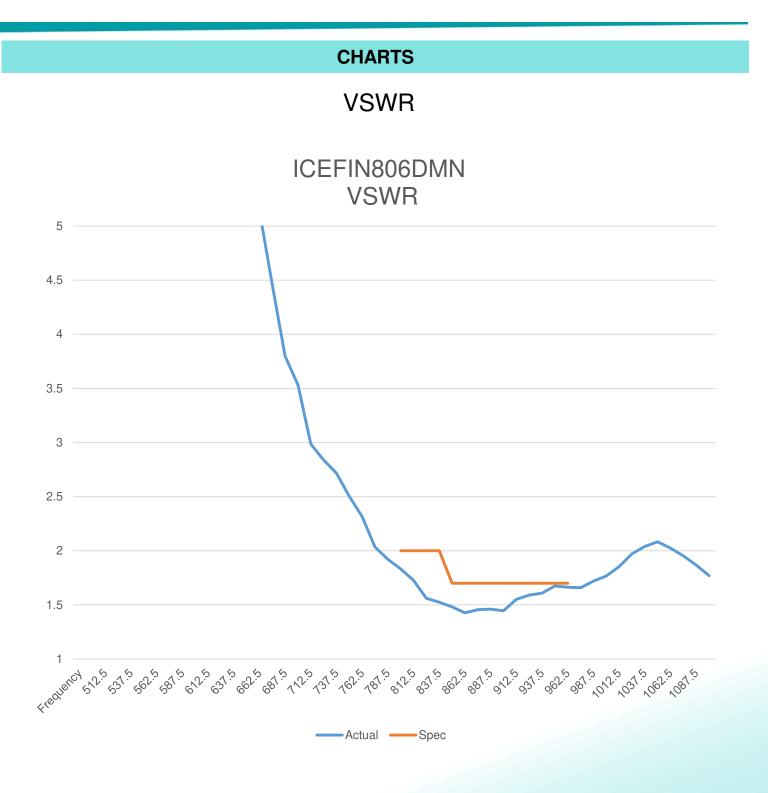
9



Description: LOW PROFILE MULTIBAND ANTENNA

Series: IceFin

### PART NUMBER: ICEFINXXX



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Description: LOW PROFILE MULTIBAND ANTENNA

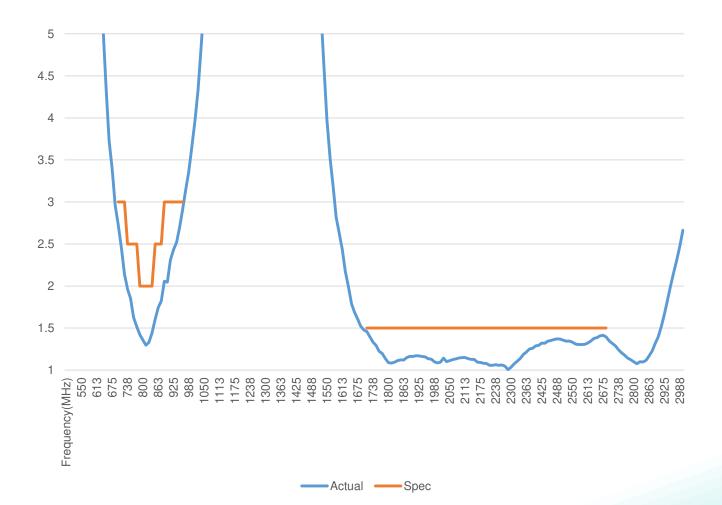
Series: IceFin

### PART NUMBER: ICEFINXXX

**CHARTS** 

# **VSWR**

ICEFINLDMN VSWR



Issue: 1706

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ROHS 11



Description: LOW PROFILE MULTIBAND ANTENNA

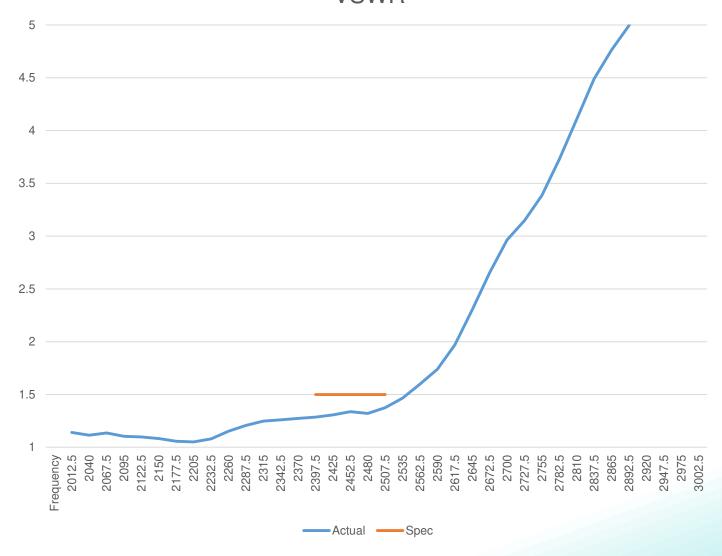
Series: IceFin

PART NUMBER: ICEFINXXX

CHARTS

# **VSWR**

ICEFIN24NMOHF VSWR



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Description: LOW PROFILE MULTIBAND ANTENNA

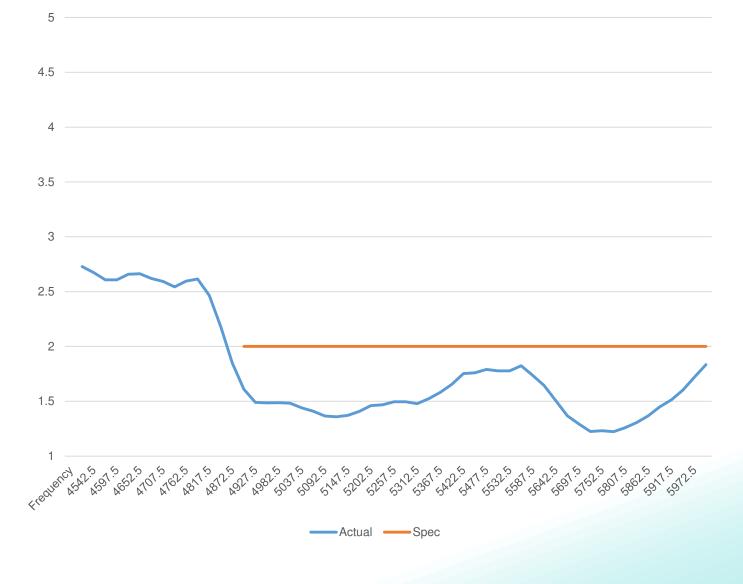
Series: IceFin

PART NUMBER: ICEFINXXX

CHARTS

# **VSWR**

ICEFIN49NMOHF VSWR



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ROHS 13



Description: LOW PROFILE MULTIBAND ANTENNA

Series: IceFin

### PART NUMBER: ICEFINXXX

**CHARTS VSWR ICEFINWNMOHF VSWR** 5 4.5 4 3.5 3 2.5 2 1.5 1 2095 Frequency

-Actual ----Spec

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ROHS 14



Description: LOW PROFILE MULTIBAND ANTENNA

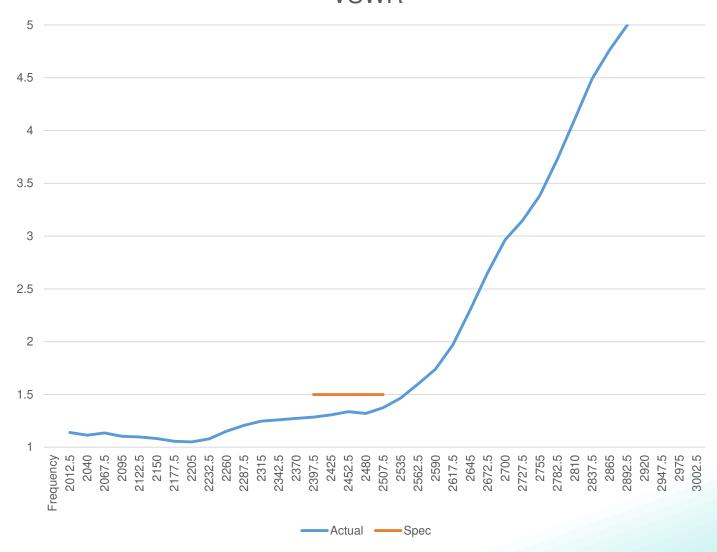
Series: IceFin

PART NUMBER: ICEFINXXX

CHARTS

# **VSWR**

ICEFIN24DMN VSWR



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Description: LOW PROFILE MULTIBAND ANTENNA

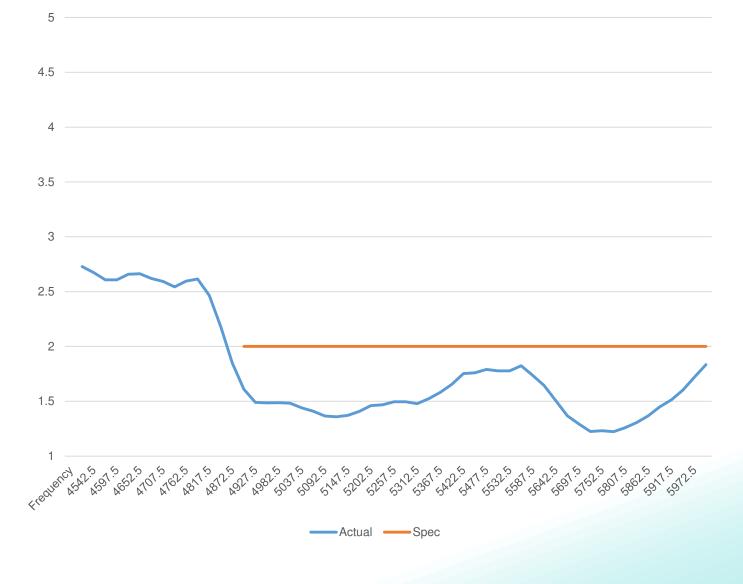
Series: IceFin

### PART NUMBER: ICEFINXXX

CHARTS

# **VSWR**

ICEFIN49DMN VSWR



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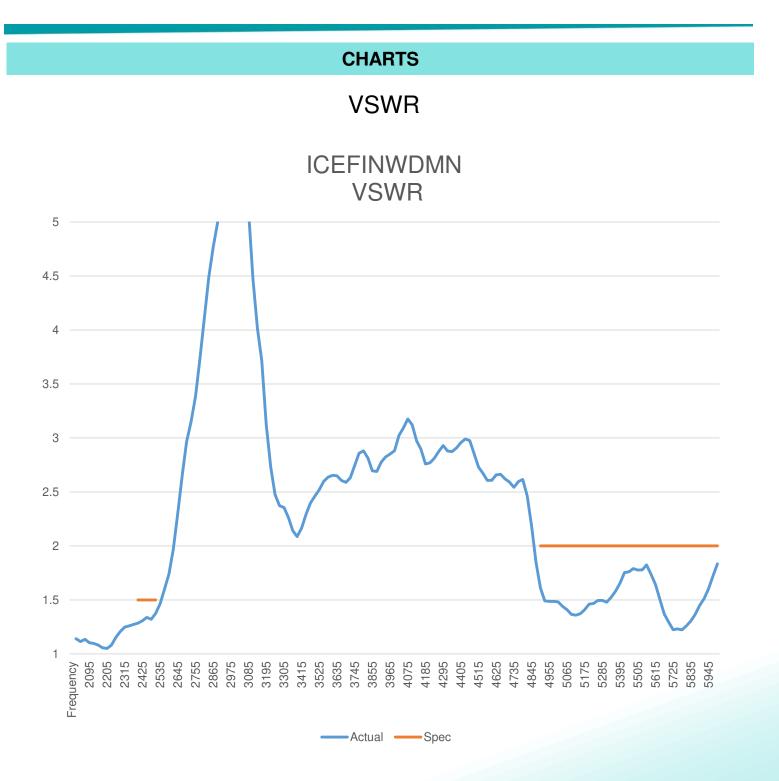




Description: LOW PROFILE MULTIBAND ANTENNA

Series: IceFin

### PART NUMBER: ICEFINXXX



#### Issue: 1706

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Description: LOW PROFILE MULTIBAND ANTENNA

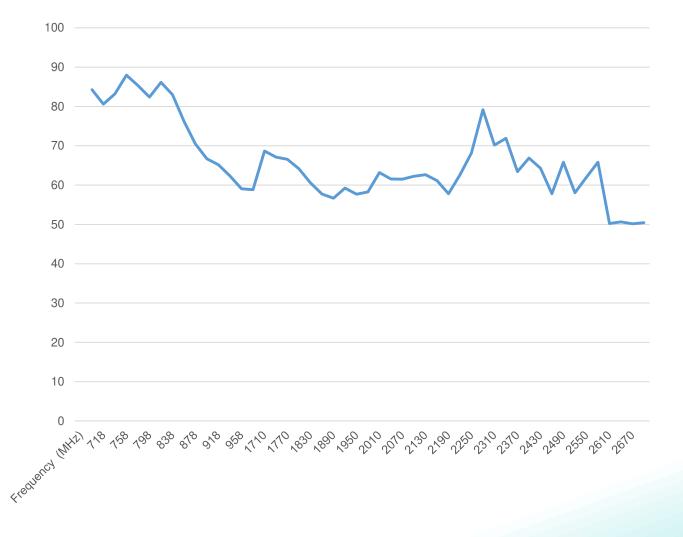
# Series: IceFin

### PART NUMBER: ICEFINXXX

# CHARTS

Efficiency(%)





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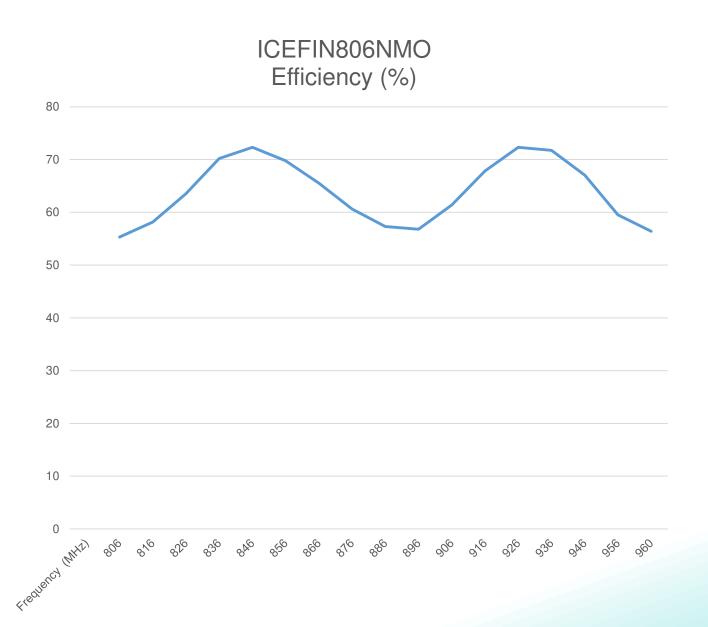
Description: LOW PROFILE MULTIBAND ANTENNA

Series: IceFin

# PART NUMBER: ICEFINXXX

# CHARTS

Efficiency(%)



#### Issue: 1706

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ROHS 19



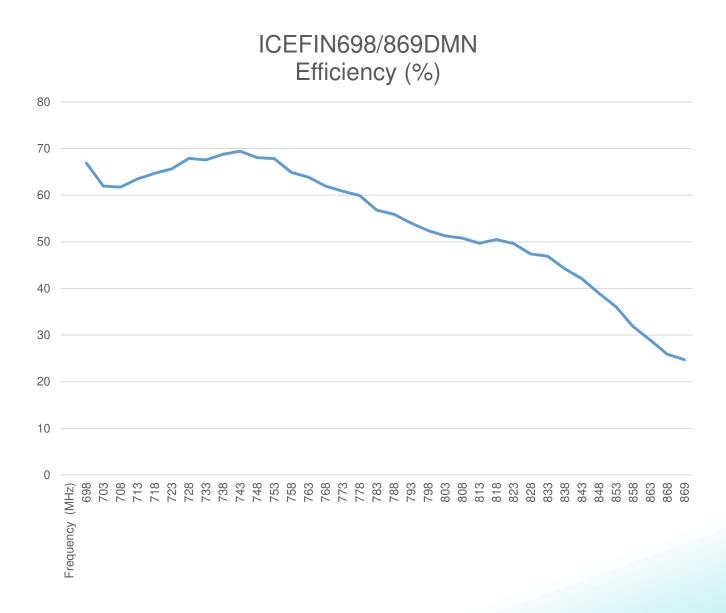
Description: LOW PROFILE MULTIBAND ANTENNA

Series: IceFin

### PART NUMBER: ICEFINXXX

### **CHARTS**

Efficiency(%)



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Description: LOW PROFILE MULTIBAND ANTENNA

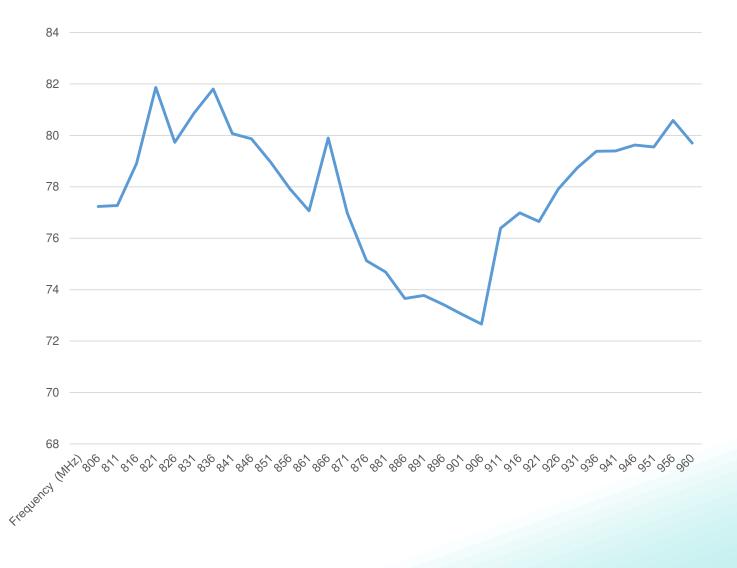
Series: IceFin

## PART NUMBER: ICEFINXXX

# CHARTS

Efficiency(%)

ICEFIN806DMN Efficiency (%)



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ROHS 21



Description: LOW PROFILE MULTIBAND ANTENNA

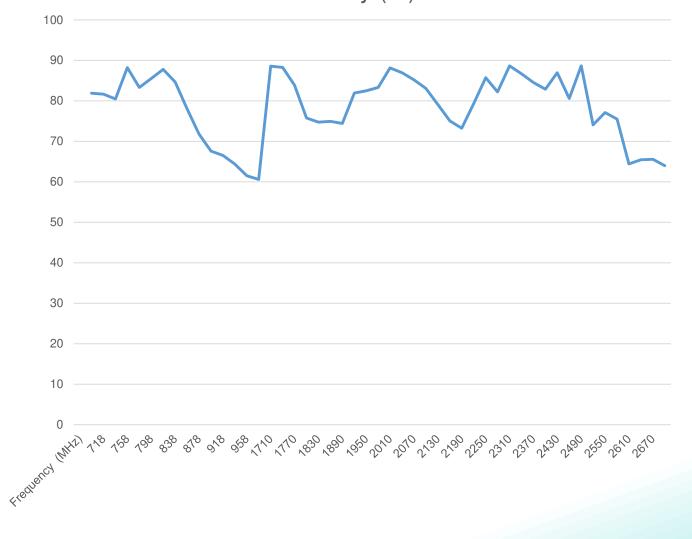
Series: IceFin

## PART NUMBER: ICEFINXXX

# CHARTS

Efficiency(%)

ICEFINLDMN Efficiency (%)



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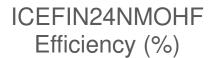
Description: LOW PROFILE MULTIBAND ANTENNA

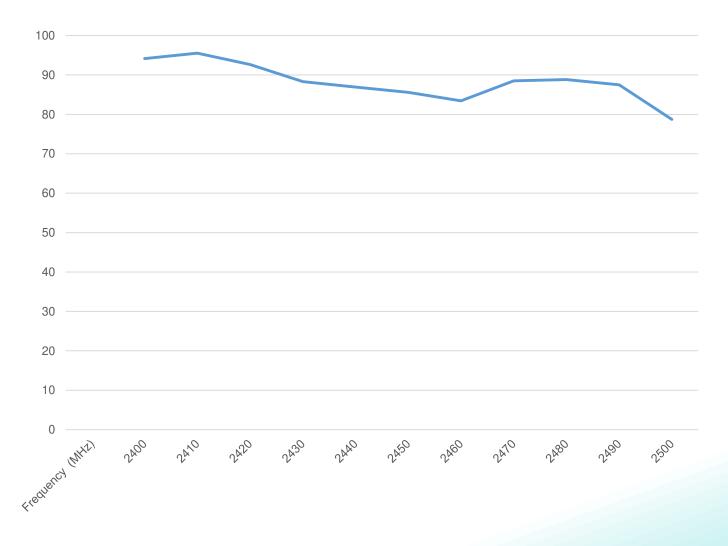
# Series: IceFin

### PART NUMBER: ICEFINXXX

## CHARTS

Efficiency(%)





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Description: LOW PROFILE MULTIBAND ANTENNA

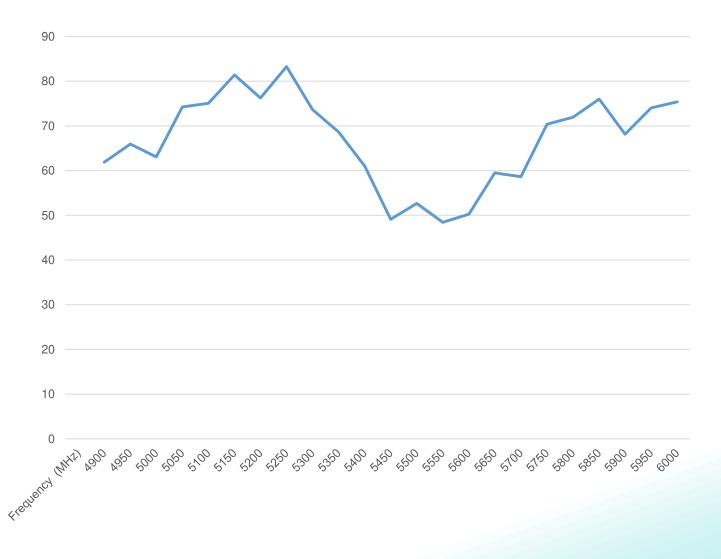
Series: IceFin

### PART NUMBER: ICEFINXXX

# CHARTS

Efficiency(%)

ICEFIN49NMOHF Efficiency (%)



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Description: LOW PROFILE MULTIBAND ANTENNA

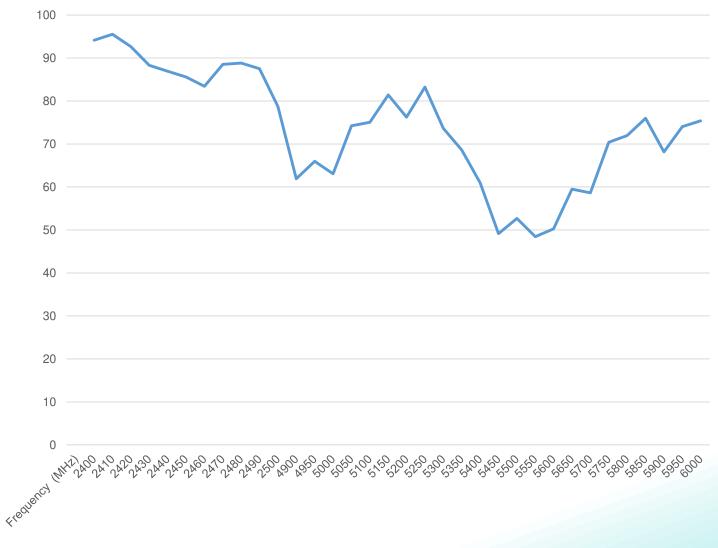
Series: IceFin

# PART NUMBER: ICEFINXXX

# CHARTS

Efficiency(%)

ICEFINWNMOHF Efficiency (%)



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