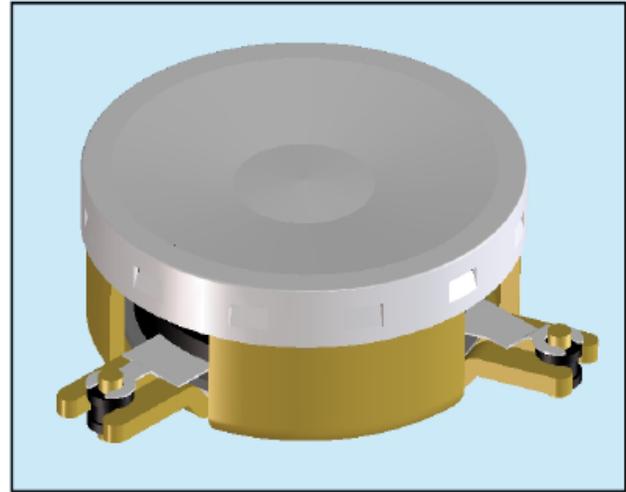


## Features

- Designed for RFID market
- 22dB Isolation typical
- 0.25dB Insertion Loss
- Low cost package
- 260°C Reflow Compatible
- RoHS\* Compliant Version of the MAFRIN0332

## Description

This circulator is designed specifically for RFID applications and features high reliability performance at a low cost. It is in a low cost package ideally suited for high volume manufacturing. M/A Com is one of the largest suppliers of isolator and circulators in the world.



## Electrical Specifications $T_A = +25^\circ\text{C}$ , $Z_0 = 50\ \text{Ohms}$

Parameter	Test Conditions	Units	Min	Typ	Max
Frequency Range	Over $T_{op}$ <sup>1</sup>	MHz	902		928
Insertion Loss	902 MHz—928 MHz, over $T_{op}$ <sup>1</sup>	dB		0.21	0.35
Isolation	902 MHz—928 MHz, over $T_{op}$ <sup>1</sup>	dB	22.0	29.0	
Return Loss	902 MHz—928 MHz, all ports, over $T_{op}$ <sup>1</sup>	dB	20.0	28.0	
Circulation	Over $T_{op}$ <sup>1</sup>			CW	

1. See "Absolute Maximum Ratings" for  $T_{op}$ .

## Absolute Maximum Ratings

Parameter	Absolute Maximum
Forward Power	100 Watts
Operating Temperature	-10°C to +85°C
Storage Temperature	-40°C to +100°C

1. Operation of this device above any one of these parameters may cause permanent damage.

\* Restrictions on Hazardous Substances, European Union Directive 2002/95/EC.

1

**ADVANCED:** Data Sheets contain information regarding a product M/A-COM Technology Solutions is considering for development. Performance is based on target specifications, simulated results, and/or prototype measurements. Commitment to develop is not guaranteed.  
**PRELIMINARY:** Data Sheets contain information regarding a product M/A-COM Technology Solutions has under development. Performance is based on engineering tests. Specifications are typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available. Commitment to produce in volume is not guaranteed.

• **North America** Tel: 800.366.2266 • **Europe** Tel: +353.21.244.6400  
 • **India** Tel: +91.80.4155721 • **China** Tel: +86.21.2407.1588  
 Visit [www.macomtech.com](http://www.macomtech.com) for additional data sheets and product information.

M/A-COM Technology Solutions Inc. and its affiliates reserve the right to make changes to the product(s) or information contained herein without notice.

## Ordering Information

Part Number	Packaging
MAFRIN0493	Tape and Reel

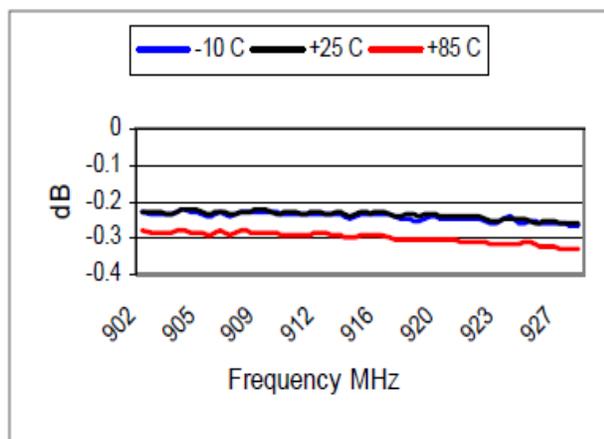
## Environmental Specifications

Devices are designed to function after exposure to the shock, vibration, thermal shock and moisture conditions typically encountered in base station and other infrastructure environments.

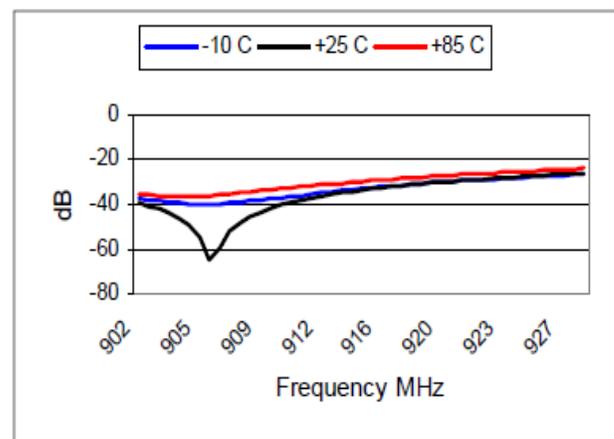
## S-Parameters

S-parameters are available on the M/A Com website at: [S-Parameters](#)

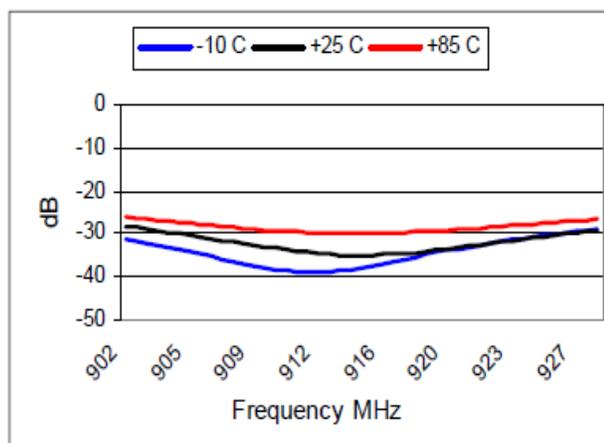
### Insertion Loss (S21)



### Isolation (S12)



### Return Loss (S11)



### Return Loss (S22)

