# **мисм Miniature Surface Mount Circulators**

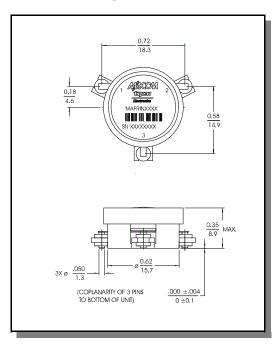
#### **Features**

- Designed for Wireless Telecommunication Systems: GSM1800, PCS1900, UMTS2100 (3G)
- High performance at low cost in a miniaturized package.
- Small size, 0.6" Vs. industry standard of 1"
- Low Mass, less than 9.0 grams vs. industry standard of greater than 18.0 grams.
- The small size utilizes less real estate on RF board while providing equal or better RF performance than the industry 1 inch standard.
- Incorporates a patented Robust Lead approach which withstands the most severe shipping, handling and processing procedures without degradation in RF or mechanical performance.
- One piece housing and patented robust lead design guarantees co-planarity between the contacts and the ground plane of 0.1 mm.
- The small size and low mass make the device suitable for automatic pick and place systems and for solder reflow profiles. This hands-free soldering further lowers the cost of ownership
- Tape-and-reel packaging being investigated
- Environmentally safe materials used, no lead option available.

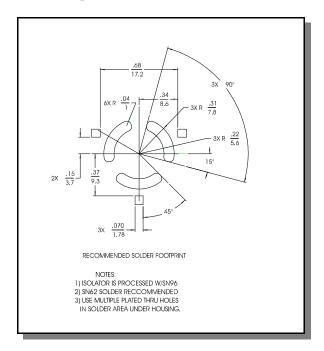
## **Description**

M/A-COM's surface mount and drop-in circulators and isolators, designed for wireless Base Station and Power Amplifier applications, feature high reliability performance at a low cost. These proven robust designs are qualification tested. Tests include temperature cycling, high temperature exposure, vibration, shock, and corrosion / moisture testing. These designs feature a low cost package ideally suited for high volume manufacturing. M/A-COM is the world's largest supplier of surface mount and drop-in isolators and circulators for the wireless infrastructure market.

#### **Outline Drawing**



## **Mounting Dimensions**



#### **Specifications**

Parameter	
Isolation	20 dB Min.
	25 dB Typical
Insertion Loss	0.35 Max.
	0.25 dB Typical
Forward Power	50 Watts
Reflected Power	50 Watts
VSWR	1.22:1 Max.
Operating Temperature	-10 °C to +70 °C

Model Number	Frequency Range
MAFRIN0149	1805 -1880 MHz
MAFRIN0150	1930 - 1990 MHz
MAFRIN0151	2110 –2170 MHz

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