

# **MI-527nn** Diplexer 700/800 MHz

The MI-527nn family of cavity diplexer products, include:

- MI-527n1, all ports DC grounded
- MI-527n2, diplexer with DC/AISG on Common High & Low Band
- MI-527n3, diplexer with DC/AISG on Common High Band, Low port DC grounded
- MI-527n4, diplexer with DC/AISG on Common Low Band, High port DC grounded
- MI-527nA, auto-sense



### **MASS**<sup>TM</sup>

#### **Microdata Advanced Site Solutions**

With our expertise in site system design we are able to provide a solution for any site sharing or upgrade scenario.

Our focus area is RF-filter based solutions including combiners, multi band TMAs, di-, tri- and quadruplexers.

Our product portfolio supports all frequencies for mobile communication bands ranging from 450 MHz to 6 GHz.

Site and network sharing makes it cost efficient to reach sparsely populated areas where new subscribers can contribute to revenue.

### **MASS**<sup>TM</sup> **Advantage**

#### **Increases coverage**

more traffic & higher ARPU

#### **Increases capacity**

more traffic & higher ARPU

### **Reduces the cost**

of network expansion

#### **Minimizes**

site acquisition issues

## **Specifications**

Low band			
Frequency Band	703 - 778 MHz (MI-5270n, MI-5271n, MI-5273n, MI-5274n)		
	713 - 788 MHz (MI-5275n, MI-5276n, MI-5277n, MI-5278n)		
Insertion Loss	0.2 dB*, max 0.5 dB		
Return Loss	>18 dB		
Rejection High band	>50 dB 800 RX	>35 dB 800 TX	
Continuous Average Power	150 W		
Intermodulation, 2x43 dBm TX Carrier	-117 dBm		
High Band			
Frequency Band	791 - 862 MHz (MI-5270n, MI-5271n, MI-5273n, MI-5274n) 801 - 862 MHz (MI-5275n, MI-5276n, MI-5277n, MI-5278n)		
Insertion Loss	0.2 dB*, max 0.5 dB		
Return Loss	>18 dB		
Rejection Low band	>50 dB 700 RX	>35 dB 700 TX	
Continuous Average Power	150 W		
Intermodulation, 2x43 dBm TX Carrier	-117 dBm		
Environmental			
Operating Temperature Range	-40 to +65°C   -40 to	+149°F	
Operation	ETS 300 019-1-4 Class 4.1E		
Storage	ETS 300 019-1-1 Class 1.2	2	
Ingress Protection	IP67		
Electrical		With Auto-Sense	
DC By Pass	3 A	2A, drop max 2.4V	
AISG pass	Yes		
AISG RL		> 12dB	
AISG Loss		< 1 dB	
MTBF		1 Mh min	
Input Votage Power		8-30 V max 0.3W	
Safety	IEC/EN 62368-1	511000	
Lightning Protection	5 kA 8/20 μs	5 kA 8/20 μs	
Mechanical	Single Mount	Dual Mount	
Dimensions (WxHxD)	170x173x56 mm 6.69x6.81x2.20 in	170x173x104 mm 6.69x6.81x4.09 in	
With Auto-Sense	To be added	To be added	
Volume (WxHxD)	1.6	3.0	
With Auto-Sense	To be added	4.0 kg/4.2 kg   10.0 lb/0.40 lb	
Weight gross/net	To be added	4.9 kg/4.3 kg   10.8 lb/9.48 lb	
Connectors Mounting	See Selection Guide		
Colour	Hose clamps or wall mount (Supporter Pole Diameter: 40-140mm) NCS 1502-R		
Bracket	Included		
*typical	Included		
сурган			



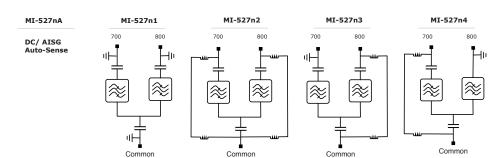
# MI-527nn Diplexer 700/800 MHz

## **Selection Guide**

		Connector (F)	
		7/16	4.3-10
Mount	Single	MI-5270n	MI-5273n
	Dual	MI-5271n	MI-5274n

Auto-Sense: MI-527nA

# **Block Diagram**

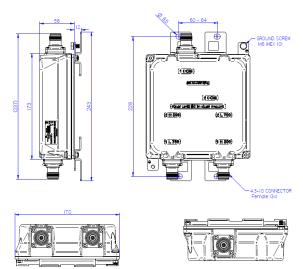


## **DC/AISG**

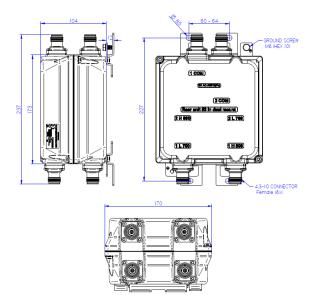
	700	800	
MI-527nA	Auto-Sense		
MI-527n1	Block	Block	
MI-527n2	Pass	Pass	
MI-527n3	Block	Pass	
MI-527n4	Pass	Block	

## **Mechanical Drawing**

This picture is showing MI-5273n



This picture is showing MI-5274n



<sup>\*</sup>The dual filter configuration is mounted on a single bracket for hose clamp or wall mount.