



# MI-299nn

## Diplexer 1800/2100+2300

The MI-299nn family of cavity diplexer products, include:

- **MI-299n1**, all ports DC grounded
- **MI-299n2**, diplexer with DC/AISG on Common – High & Low Band
- **MI-299n3**, diplexer with DC/AISG on Common - High Band, Low port DC grounded
- **MI-299n4**, diplexer with DC/AISG on Common - Low Band, High port DC grounded
- **MI-299nA**, Auto-Sense

## MASS™

### 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™

### Advantage

#### Increases coverage

more traffic & higher ARPU

#### Increases capacity

more traffic & higher ARPU

#### Reduces the cost

of network expansion

#### Minimizes

site acquisition issues

## Specifications

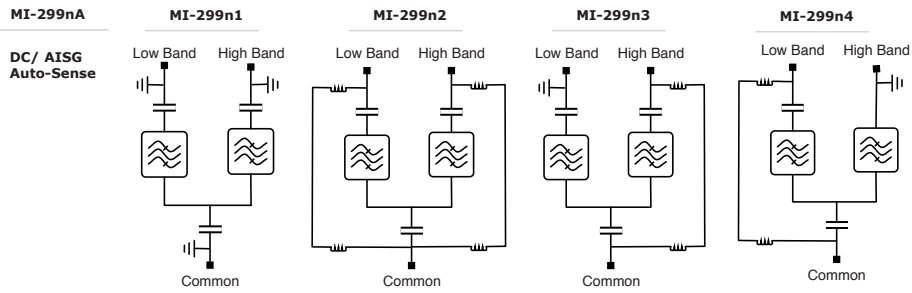
1800 (Low band)	
Frequency Band	1710 - 1880 MHz
Insertion Loss RX	<0.15 dB *
Insertion Loss TX	<0.2 dB *
Return Loss	20 dB *, (18 dB min.)
Rejection High band	> 50 dB
Power Handling	250 W avg 2kW peak
Intermodulation, 2x43 dBm TX Carrier	-117 dBm
2100+2300 (High band)	
Frequency Band	1920 - 2170 MHz & 2300-2400 MHz
Insertion Loss 1920 - 1980 MHz	<0.25 dB *
Insertion Loss 2110 - 2170 MHz & 2300-2400 MHz	<0.15 dB *
Return Loss	20 dB *, (18 dB min.)
Rejection Low band	> 50 dB
Power Handling	250 W avg 2kW peak
Intermodulation, 2x43 dBm TX Carrier	-117 dBm
Environmental	
Operating Temperature Range	-40 to +65°C
Operation	ETS 300 019-1-4 Class 4.1E
Storage	ETS 300 019-1-1 Class 1.2
Ingress Protection	IP67
Electrical	
DC By Pass	3 A
AISG pass	Yes
Lightning Protection	3 kA 10/350 µs, 10 kA 8/20 µs
Mechanical	
Dimensions (WxHxD) excl connectors	185x163x50 (single) 110 (dual)
Connectors	See Selection Guide
Mounting	Hose clamps or wall mount
Volume	<1.5 l (single) 3.0 l (dual)
Weight	<2.6 kg (single) 5.2 kg (dual)
Colour	NCS 1502-R
* Typical	

## Selection Guide

		Connector (F)	
		7/16	4.3-10
Mount	Single	MI-2990n	MI-2993n
	Dual	MI-2991n	MI-2994n

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

### Block Diagram



### Mechanical Drawing

\*This picture is showing MI-2990n

