

Directional Coupler

3-Port Directional Coupler

698 to 2700 MHz

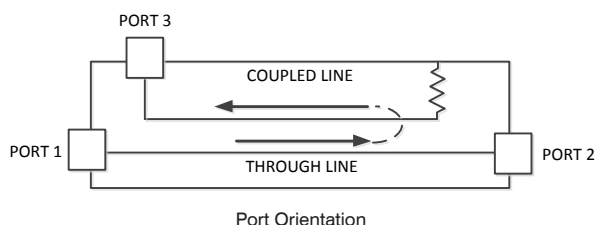
SP6927-23xx-11 Series



RFI 3-Port Directional Couplers are used in a variety of RF combining, sampling and power splitting applications. Typically used in DAS (Distributed Antenna Systems) for sampling RF for fibre fed systems and or distributing power throughout feeder cable networks. RFI provide a wide product range of coupling values in the most popular frequency bands which enables optimised and balanced system levels.

Features:

- Broadband 698-2700 MHz covering multi-cellular bands.
- Manufactured to a low PIM ≤ -150 dBc (3rd Order 2x43 dBm carriers) rating.
- Primarily used for optimising feeder cable signal distribution.
- Suitable for use with simplex and duplex channels, analogue or digital communications.
- Optional 7.16DIN (F) Termination Connector SP6927-23xx-DIN range available.
- Suitable for use in multi-carrier systems.
- Wide range of coupling values.
- Environmental IP 65 Rating.



Specifications

Model Number	SP6927-23xx-11									
Frequency Range	698-2700 MHz									
Model Number Derivative - SP6927-23xx-11	05	06	07	08	10	12	15	20	30	
Decoupled level (Port 3) dB	5	6	7	8	10	12	15	20	30	
Insertion loss - Typical (Port 1 - 2) dB	≤ 1.7	≤ 1.7	≤ 1.4	≤ 1.4	≤ 0.7	≤ 0.7	≤ 0.4	≤ 0.2	≤ 0.2	
In-Band Ripple dB	$\leq \pm 0.8$	$\leq \pm 0.8$	$\leq \pm 0.8$	$\leq \pm 0.8$	$\leq \pm 1.0$	$\leq \pm 1.0$	$\leq \pm 1.0$	$\leq \pm 1.0$	$\leq \pm 1.0$	$\leq \pm 1.0$
Power Rating	200 W									
Impedance	50 Ohms									
Input Return Loss / VSWR - Typical	19 dB / 1.25:1									
Directivity	≥ 20 dB									
PIM (3rd Order 2x43dBm)	≤ -150 dBc									
Connector Type (all termination ports)	N female									
IP Rating	IP65									
Finish	Black - Painted									
Mounting	2 x 3.1 mm OD non-threaded holes through unit body									
Dimensions (excl connectors)	H 40 mm x W 18 mm x L 123 mm / H 1.57" x W 0.70" x L 4.84"									
Weight	0.24 kgs / 0.53 lbs									
Temperature	-30° C to 60° C / -22° F to 140° F									

Please consult with RFI for the availability of coupling values not listed in the specification table.

Ordering Information

Model Number	Description
SP6927-2305-11	Directional Coupler 698-2700MHz, 3-Port 5dB Coupling Loss N (female) Connectors
SP6927-2306-11	Directional Coupler 698-2700MHz, 3-Port 6dB Coupling Loss N (female) Connectors
SP6927-2307-11	Directional Coupler 698-2700MHz, 3-Port 7dB Coupling Loss N (female) Connectors
SP6927-2308-11	Directional Coupler 698-2700MHz, 3-Port 8dB Coupling Loss N (female) Connectors
SP6927-2310-11	Directional Coupler 698-2700MHz, 3-Port 10dB Coupling Loss N (female) Connectors
SP6927-2312-11	Directional Coupler 698-2700MHz, 3-Port 12dB Coupling Loss N (female) Connectors
SP6927-2315-11	Directional Coupler 698-2700MHz, 3-Port 15dB Coupling Loss N (female) Connectors
SP6927-2320-11	Directional Coupler 698-2700MHz, 3-Port 20dB Coupling Loss N (female) Connectors
SP6927-2330-11	Directional Coupler 698-2700MHz, 3-Port 30dB Coupling Loss N (female) Connectors