

Directional Coupler

3-Port Directional Coupler

380-2700MHz

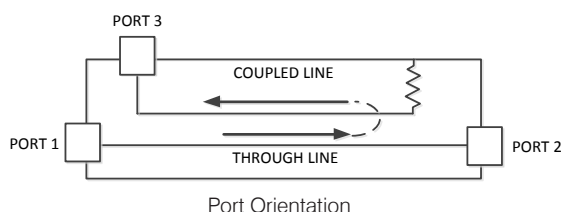
SP3827-23xx-11 Series



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 distributing power throughout feeder cable networks. Using directional couplers suitable for covering UHF to high end cellular frequencies saves on the cost of upgrades when public safety radio coverage may have to be accommodated on a DAS designed for cellular coverage. The RFI multiband directional couplers are available in a range of coupling values which gives the network designers and planners the ability to optimise and balance RF levels throughout a DAS network.

Features:

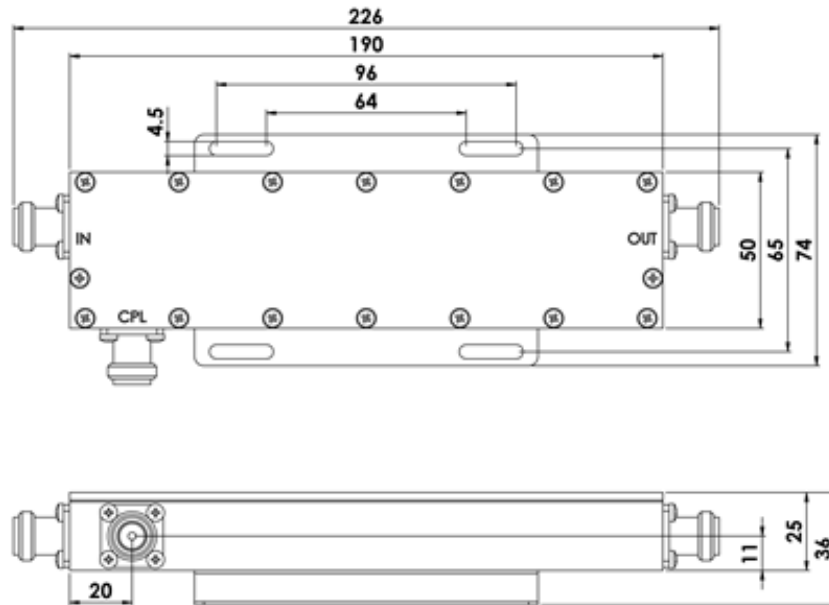
- Multi-Band 380-2700MHz covering UHF and Cellular bands.
- Low PIM $\leq -150\text{dBc}$ (3rd Order 2x43dBm carriers).
- Primarily used for optimising feeder cable signal distribution.
- Suitable for use with simplex and duplex channels, analogue or digital radio communications.
- Optional 7.16DIN Termination Connector SP3827-23xx-DIN range available.
- Wide range of coupling values.
- Environmental IP 67 Rating.
- Includes S/S Mounting bracket.



Specifications

Model Number	SP3827-23xx-11						
Type	380-2700MHz						
Model Number Derivative - SP3827-23xx-11	05	06	08	10	12	15	20
Decoupled level (Port 3)	5dB	6dB	8dB	10dB	12dB	15dB	20dB
Insertion loss - Typical (Port 1 -2).	$\leq 2.2\text{dB}$	$\leq 1.9\text{dB}$	$\leq 1.4\text{dB}$	$\leq 0.7\text{dB}$	$\leq 0.5\text{dB}$	$\leq 0.4\text{dB}$	$\leq 0.3\text{dB}$
Power Rating	200W						
Impedance	50 Ohms						
Input Return Loss / VSWR - Typical.	19dB / 1.25:1						
Directivity - Typical	20dB						
PIM (3rd Order 2x43dBm)	$\leq -150\text{dBc}$						
Connector Type (all termination ports)	N (F)						
IP Rating	IP67						
Finish	Painted Black						
Mounting	Stainless steel mounting bracket included						
Dimensions (excl connectors & mounting bracket)	H 25mm x W 50mm x L 190mm / H 0.98" x W 1.97" x L 7.48"						
Weight	0.35kgs / 0.77lbs						
Temperature	-30° to +60° C / -22° to +140° F						

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Ordering information	Description
SP3827-2305-11	Directional Coupler 380-2700MHz, 3-Port 5dB Coupling Loss N (F) Connectors
SP3827-2306-11	Directional Coupler 380-2700MHz, 3-Port 6dB Coupling Loss N (F) Connectors
SP3827-2308-11	Directional Coupler 380-2700MHz, 3-Port 8dB Coupling Loss N (F) Connectors
SP3827-2310-11	Directional Coupler 380-2700MHz, 3-Port 10dB Coupling Loss N (F) Connectors
SP3827-2312-11	Directional Coupler 380-2700MHz, 3-Port 12dB Coupling Loss N (F) Connectors
SP3827-2315-11	Directional Coupler 380-2700MHz, 3-Port 15dB Coupling Loss N (F) Connectors
SP3827-2320-11	Directional Coupler 380-2700MHz, 3-Port 20dB Coupling Loss N (F) Connectors