



# MODEL SP 100/DC 100



Motorola's STARLINE 1 GHz splitters and directional couplers are used with the 1 GHz MiniBridger series amplifiers, model MB100. The purpose of these devices is to activate and direct signal to output ports 3 and 4 in the MB100 amplifier. The MB100 amplifier is shipped with a jumper installed that can be used to activate either port 3 or 4 as the second output port. To obtain signal at both ports 3 and 4, install the appropriate splitter or directional coupler.

#### ERGONOMICS

Ergonomics add to the ease of use for the STARLINE 1 GHz splitter, model SP100, and the STARLINE 1 GHz directional couplers, models DC100/\*. This "ease of use" is achieved by implementing a plastic shell with guides that allow easy installation and removal through the chassis cover.

All of Motorola's field-installed components are easily accessible through the chassis cover and can be installed and removed by a "gloved hand" without a tool. Block diagrams distinguishing forward and return paths by color are printed on the chassis covers for easy reference of components.

Motorola's STARLINE 1 GHz splitters and directional couplers activate and direct signal to output ports 3 and 4 of the 1GHz MiniBridger amplifier.

#### BENEFITS INCLUDE:

- Directional couplers are offered in three values: 8, 10 and 12dB
- Ergonomics – installation and removal of accessory without tool or removal of chassis cover
- FCC and CENELEC approved

Note: The arrow on the directional coupler indicates the coupled port, and therefore, the lower level.

## SP100 SPECIFICATIONS

PARAMETER	UNIT	SPECIFICATIONS
Passband	MHz	5 - 1003
Return Loss	dB min	-16.0
Insertion Loss	dB max	-5.0
Flatness	dB max	1.0 peak-to-peak
Isolation	dB min	-18.0

## DC100/8 SPECIFICATIONS

PARAMETER	UNIT	SPECIFICATIONS
Passband	MHz	5 - 1003
Return Loss	dB min (input port / output port / coupled port)	-16.0 / -20.0 / -18.0
Insertion Loss	dB max (input to output port) dB max (input to coupled port)	-3.3 -8.5
Flatness	dB max (input to output port) dB max (input to coupled port)	0.75 peak-to-peak 1.0 peak-to-peak
Isolation	dB min	-20.0

## DC100/10 SPECIFICATIONS

PARAMETER	UNIT	SPECIFICATIONS
Passband	MHz	5 - 1003
Return Loss	dB min (input port / output port / coupled port)	-16.0 / -20.0 / -19.0
Insertion Loss	dB max (input to output port) dB max (input to coupled port)	-2.5 -10.5
Flatness	dB max (input to output port) dB max (input to coupled port)	0.50 peak-to-peak 0.75 peak-to-peak
Isolation	dB min	-20.0

## DC100/12 SPECIFICATIONS

PARAMETER	UNIT	SPECIFICATIONS
Passband	MHz	5 - 1003
Return Loss	dB min (input port / output port / coupled port)	-18.0 / -18.0 / -18.0
Insertion Loss	dB max (input to output port) dB max (input to coupled port)	-2.2 -12.5
Flatness	dB max (input to output port) dB max (input to coupled port)	0.50 peak-to-peak 1.0 peak-to-peak
Isolation	dB min	-21.0