Optical Passives (OSP)

OP91S2Q, OP91S4D

Quad 1x2 and Dual 1x4 Optical Splitters/Combiners

FEATURES

- Low insertion loss
- Wide operating wavelength windows suitable for CWDM applications
- Operating temperature range –40° to +85°C
- Telcordia GR-1209 and GR-1221 qualified, providing excellent environmental and mechanical stability
- MPO connectors with eight outputs
- Epoxy-free on optical path

PRODUCT OVERVIEW

ARRIS's OP91S2Q and OP91S4D field splitters provide four separate 1x2 splitters and two 1x4 splitters, respectively, in ruggedized packages. These splitters/combiners have been designed with high uniformity and low insertion and polarization dependent loss. This product family offers balanced outputs on a standard MPO connector. Both products are designed for use in an outdoor environment within a temperature range of –40° to +85°C.

SPECIFICATIONS

Characteristics	Specification
Physical	
Dimensions	3.8” L x 3.1” W x 0.3” H (9.6 cm x 7.8 cm x 0.8 cm)
Weight	0.2 lb (0.9 kg)
Environmental	
Operating Temperature Range	–40° to +85°C (–40° to +185°F)
Storage Temperature Range	–40° to +85°C (–40° to +185°F)
Humidity	5% to 95% non-condensing
Optical	
Optical connectors	See Ordering Information
Splitter types (equal outputs)	• OP91S2Q: 4 independent 1x2 splitters • OP91S4D: 2 1x4 splitters (INP A to OUTA, fibers 1-4 to MPO connector; and INP B to OUTB, fibers 5-8 to MPO connector)
Passband wavelength	• OP91S2Q: 1263.5-1357.5 nm and 1423.5-1655 nm • OP91S4D: 1263.5-1655.0 nm
Directivity, min	55 dB
Spectral flatness max (typ.)	**For OP91S2Q:** 0.25 (0.15) dB for the higher-output port and 1530–1560 nm 0.35 (0.25) dB for the higher-output port and 1260–1360 nm 0.45 (0.35) dB for the higher-output port and 1420–1620 nm 0.4 dB for the lower-output port of 50/50. 55/45, 60/40, 65/35, and 70/30 splitters 0.5 dB for the lower-output port of 75/25, 80/20, and 85/15 splitters 0.6 dB for the lower-output port of 90/10. 95/5, and 99/1 splitters **For OP91S4D:** 0.25 dB for 1263.5–1655 nm
Input power handling, max	27 dBm
Polarization dependent loss, max	0.15 dB
Model-dependent parameters	

Model Number	Splitter Type	Insertion Loss, max, with conns (dB)	Uniformity, max (dB)	Return Loss, min (dB)
OP91S2Q-EQ-R2-MP	Quad 1x2	3.5	0.4	55
OP91S4D-EQ-R2-MP	Dual 1x4	7.5	0.7	50

NOTE: Fiber length for all models is minimum 1 meter.

ORDERING INFORMATION

Part Number	Description
OP91S2Q-EQ-R2-MP	Four 1x2 balanced splitters with 2 mm jacketed fibers in 96x78x8 mm ruggedized “F” case, with four SC/APC input connectors and one MPO/APC output connector
OP91S4D-EQ-R2-MP	Two 1x4 balanced splitters with 2 mm jacketed fibers in 96x78x8 mm ruggedized “F” case, with two SC/APC input connectors and one MPO/APC output connector

RELATED PRODUCTS

Optical Transmitters	Optical Passives
Digital Return	Optical Patch Cords
Optical Nodes	Installation Services

Customer Care

Contact Customer Care for product information and sales:

- United States: 866-36-ARRIS
- International: +1-678-473-5656

87-10483-RevD_OP91Sxx-EQ-R2-MP_Splitters 06/2018 ECO14243