

SWDM, CWDM, LWDM Z-BLOCK

Optical Filter Subassemblies for Datacom Transceivers

The Coherent Z-block subassemblies achieve very low insertion loss, enabling efficient wavelength multiplexing and demultiplexing in high-speed optical transceivers such as 100G, 400G, 800G in data centers and optical communication networks. The very high parallelism pitch tolerance of the Z-blocks enable a rapid alignment process during coupling and assembly. The Z-block subassemblies are available for SWDM, LAN-WDM and CWDM4 transceivers and with custom filter pitch designs.



FEATURES

- Compact Design
- Automatic Production
- Customizable Assembly
- Excellent Parallelism
- High Reliability

APPLICATIONS

- MUX/DEMUX for Datacom/Telecom

Specifications

Parameter	Unit	SWDM	CWDM	LWDM
Operation Wavelength	nm	840 ~ 960	1250 ~ 1350	1280 ~ 1330
Center Wavelength(λ_c)	nm	851/881 911/941	1271/1291 1311/1331	1295.56/1300.05 1304.56/1309.14
Passband(PB)	nm	$>\lambda_c \pm 8$	$>\lambda_c \pm 6.5$	$>\lambda_c \pm 1.05$
Max. Insertion Loss @PB	dB	<1.0	<1.0	<1.0
IL Uniformity @PB	dB	<0.4	<0.4	<0.5
PDL@ Passband	dB	<0.25	<0.25	<0.25
Adjacent CH Crosstalk @PB	dB	>25	>25	>25
Non-Adj. CH XT@PB	dB	>30	>30	>30
Typical A.O.I(in air)	Deg.	8/13.5, etc.	8/13.5, etc.	8/13, etc.
Pitch	um	500/750/900/1000/1100/1500, etc.		
Typical Beam Parallelism	Deg.	<0.2	<0.2	<0.2
Edge chip	mm	<0.1	<0.1	<0.1
Corner chip	mm	<0.2	<0.2	<0.2
Surface quality	-	40/20	40/20	40/20
Operation temperature	°C	-20 ~ +85	-20 ~ +85	-5 ~ +75
Storage temperature	°C	-40 ~ +85	-40 ~ +85	-40 ~ +85