Fused 400~1600nm Wide Band MMF & SMF Optical Circulator (FCIR)

Specifications

Parameters			Unit	3 Port, P1 → P2 ↔ P3, P3 ↛ P1, P2↛ P1			
Fiber Spec [a]	Fiber Combination		-	Type 1 (T1)		Type 2 (T2)	
	Fiber Type		-	Port 1	Port 2 and Port 3	Port 1	Port 2 and Port 3
			-	SMF-28e	HP400/430-37-730E	MMF50/125	MMF 105/125
	Core Diameter (Nominal)		-	9μm	400μm	50μm	105μm
	Core NA		-	0.14	0.39	0.22	0.22
	Cladding Diameter		-	125μm	430μm	125μm	125μm
Operating Wavelength (λop)			nm	400~1600			
Insertion Loss [b] [c]		Port 1 to 2	dB	≤0.8		≤1.3	
		Port 2 to 3	dB	≤0.8		≤1.3	
		Port 3 to 2	dB	≤0.5		≤1.0	
Isolation [b]		Port 2 to 1	dB	≥30		≥8.5	
Polarization Dependent Loss (PDL)			dB	≤0.2		≤0.2	
PMD			ps	≤0.1		≤0.1	
Directivity [b] [d]		Port 1 to 3	dB	≥15		≥40	
		Port 3 to 1	dB	≥30		≥45	
Return Loss (RL)			dB	≥30			
Max Power Handling CW [e]				1W with connectors, 4W by splice			
Package Size			mm	φ4 x L65			
Operating Temperature			℃	0 ~ +60			
Storage Temperature			℃	-40 ~ +85			

[a] Fiber type configurable.

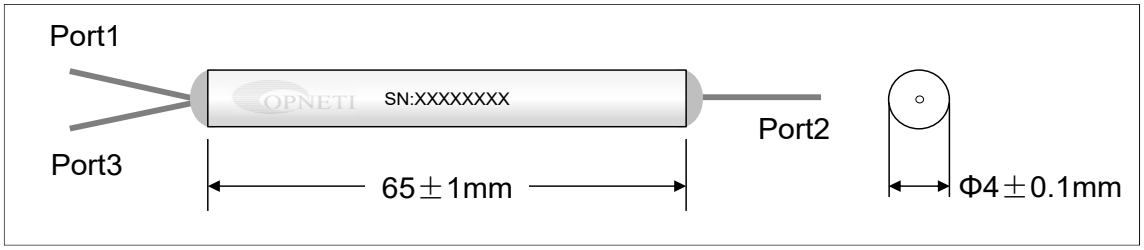
[b] Test with narrow band LED or DFB source.

[c] Photodarkening may affect long-term performance at lower wavelengths (≤500 nm).

[d] Back reflection of connector surfaces will reduce directivity, Angle polished connector is recommended.

[e] Total power including power (P1 → P2), Power (P2 → P3), Power (P3 → P2). 50W available on request.

Package Dimensions



Ordering Information

FCIR- ①-②-③-④④④-⑤⑤-⑥-⑦⑦-⑧⑧⑧⑧

①	Type	3=3 Port;
②	Grade	P=P Grade;
③	Wavelength	W=400~1600;
④	Pigtail Type	250=250μm bare fiber; 900=900μm loose tube;
⑤	Fiber Type	T1; T2;
⑥	Fiber Length	1=1m; XX=other;
⑦	Connector	NE=None; FA=FC/APC; FC=FC/UPC; SA=SC/APC; SC=SC/UPC; LC=LC/UPC; XX=Others;
⑧	Package size	4x65;