

CPS7 Series: Single Mode Single Window Wide Band Fused Couplers with Low PDL

Parameters			Performance (Excluding connectors)														
Center Wavelength λ_c , (nm)			1310 or 1550														
Operating Wavelength (nm)			$\lambda_c \pm 40$														
Configuration			1x2 or 2x2														
Split Ratio (%)			1	2	5	10	20	30	40	50	60	70	80	90	95	98	99
Insertion Loss@ 25°C (dB)	Max	P	21.5	18.8	14.5	11.0	7.5	5.6	4.4	3.4	2.4	1.8	1.2	0.68	0.45	0.30	0.24
		A	22.0	20.0	15.0	12.0	8.0	6.0	4.6	3.7	2.6	2.0	1.3	0.8	0.50	0.32	0.30
	Min	P	19.0	16.2	12.2	9.4	6.6	5.0	3.7	2.7	-	-	-	-	-	-	-
		A	18.7	15.5	11.7	8.7	6.2	4.7	3.6	2.5	-	-	-	-	-	-	-
Maximum PDL (dB)		P	0.12	0.12	0.12	0.1	0.1	0.1	0.1	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
		A	0.12	0.12	0.12	0.1	0.1	0.1	0.1	0.07	0.07	0.06	0.05	0.05	0.05	0.05	0.05
Maximum TDL (dB)			0.6	0.6	0.6	0.5	0.5	0.4	0.4	0.4	0.3	0.2	0.2	0.2	0.1	0.1	0.1
Optical Directivity (dB)			= 55														
Maximum Optical Power Handling (mW)			500														
Operating temperature (°C)			- 10 ~ 70														
Storage temperature (°C)			-40 ~ 85														
Fiber Type			Corning HI 1060 for 980 nm Coupler, SMF28 for other wavelengths														
Package Dimension (mm)																	
Bare Fiber			ϕ 3.0 x 54														
900 μ m Loose Tube			ϕ 3.0 x 60														
2mm or 3mm Jacket			96 x 12 x 6.4														

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Product Family: CPS Series

Product Family Code	Description	Product Derivatives
CPS	Single mode 1x2 or 2x2 fused couplers operating in the 980 nm, 1310 nm, 1480 nm, and/or 1550 nm regions (Center wavelength = λ_c)	<p>CPS1: Single-mode single-window couplers operate over ($\lambda_c \pm 10$) nm wavelength range.</p> <p>CPS2: Single-mode single-window couplers operate over ($\lambda_c \pm 40$) nm wavelength range.</p> <p>CPS3: Single-mode couplers operate over dual wavelength windows (1310\pm40/1550\pm40 nm or 1480\pm40/1550\pm40 nm).</p> <p>CPS7: Single-mode single-window couplers operate over (1310 \pm 10) nm or (1550 \pm 10) nm wavelength ranges with low PDL at both output ports</p> <p>CPS8: Single-mode couplers operate over dual wavelength windows (1310\pm40/1550\pm40 nm or 1480\pm40/1550\pm40 nm) with low PDL at both output ports</p>

Part Number for CPS Family



<p>Wavelength</p> <p>A=1310 nm</p> <p>B=1480 nm</p> <p>C=1550 nm</p> <p>E=980 nm (CPS1)</p> <p>I=1310/1550 (CPS3 and CPS8 only)</p> <p>J=1480/1550 (CPS3 and CPS8 only)</p>	<p>Configuration</p> <p>12=1x2</p> <p>22=2x2</p>	<p>Split Ratio</p> <p>50 = 50:50</p> <p>40 = 40:60</p> <p>30 = 30:70</p> <p>20 = 20:80</p> <p>10 = 10:90</p> <p>05 = 5:95</p> <p>02 = 2:98</p> <p>01 = 1:99</p>	<p>Package Type</p> <p>A=250 μm bare fiber</p> <p>B=900 μm loose tube</p> <p>C=3 mm jacket</p> <p>D=2 mm jacket</p> <p>E=3mm Polaxar™</p> <p>F=2mm Polaxar™</p>	<p>Fiber Length</p> <p>10=1.0 m</p> <p>15=1.5 m</p> <p>30=3.0 m</p> <p>mn=m.n meters</p> <p>10 Only for Polaxar™ package</p>	<p>Connectors</p> <p>0=none</p> <p>2=FC/UPC</p> <p>3=FC/APC</p> <p>4=SC/UPC</p> <p>5=SC/APC</p> <p>6=ST/UPC</p> <p>7=LC/UPC</p> <p>9=FC/SPC</p>	<p>A=FC/PC</p> <p>B=SC/SPC</p> <p>C=SC/PC</p> <p>D=ST/SPC</p> <p>E=ST/PC</p> <p>F=LC/SPC</p> <p>G=LC/PC</p> <p>H=MU/UPC</p> <p>I=MU/PC</p> <p>J=LC/APC</p>
<p>Product Type</p> <p>1 = standard</p> <p>2 = wide band</p> <p>3 = dual window</p> <p>7 = wide band low PDL</p> <p>8 = dual window low PDL</p>			<p>(Option E and F not applicable to CPS7 and CPS 8)</p>			
			<p>Fiber Type</p> <p>All wavelengths except 980nm</p> <p>1 = SMF-28</p> <p>980nm wavelength</p> <p>3 = Flexcor 1060</p>			

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