

## CPS3 Series: Single Mode Dual Window Wide-Band Fused Couplers

Parameters			Performance (Excluding connectors)														
Center Wavelength $\lambda_c$ , (nm)			1310/1550, 1480/1550														
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	23.0	20.0	15.0	11.5	8.0	6.0	4.7	3.6	2.8	2.0	1.5	0.7	0.5	0.3	0.26
		A	24.0	21.0	16.0	12.0	8.2	6.4	5.0	3.9	2.9	2.1	1.6	0.9	0.6	0.35	0.30
	Min	P	18.3	15.8	12.5	9.3	6.5	4.9	3.7	2.6	-	-	-	-	-	-	-
		A	18.0	15.1	11.5	8.7	6.2	4.4	3.3	2.4	-	-	-	-	-	-	-
Maximum PDL (dB)		P	0.25	0.25	0.25	0.20	0.14	0.14	0.14	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
		A	0.25	0.25	0.25	0.20	0.18	0.16	0.15	0.15	0.13	0.12	0.1	0.1	0.1	0.1	0.1
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)			Bare fiber, 900 $\mu$ m loose tube, 3mm or 2mm packages: -10~70 Polaxar™ packages: -40 ~ 80														
Storage temperature (°C)			-40 ~ 85														
Fiber Type			Corning SMF28														
Package Dimension (mm)																	
Bare Fiber			$\phi$ 3.0 x 54														
900 $\mu$ m Loose Tube			$\phi$ 3.0 x 60														
2mm or 3mm Jacket			96 x 12 x 6.4														
Polaxar™			100 x 12 x 6.4 (Cable length 1m only)														

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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 = $\lambda_c$ )	<p>CPS1: Single-mode single-window couplers operate over (<math>\lambda_c \pm 10</math>) nm wavelength range.</p> <p>CPS2: Single-mode single-window couplers operate over (<math>\lambda_c \pm 40</math>) nm wavelength range.</p> <p>CPS3: Single-mode couplers operate over dual wavelength windows (1310<math>\pm</math>40/1550<math>\pm</math>40 nm or 1480<math>\pm</math>40/1550<math>\pm</math>40 nm).</p> <p>CPS7: Single-mode single-window couplers operate over (1310 <math>\pm</math> 10) nm or (1550 <math>\pm</math> 10) nm wavelength ranges with low PDL at both output ports</p> <p>CPS8: Single-mode couplers operate over dual wavelength windows (1310<math>\pm</math>40/1550<math>\pm</math>40 nm or 1480<math>\pm</math>40/1550<math>\pm</math>40 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 <math>\mu</math>m bare fiber</p> <p>B=900 <math>\mu</math>m 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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