



NOTES:

- 'TAP' & 'INPUT 2' FIBERS WILL BE MARKED '2' WITH LABEL MARKER APPROXIMATELY 10.0 cm FROM EACH END OF THE LEAD OR CONNECTOR. THERE IS NO MARKING ON 'THROUGHPUT' & 'INPUT 1' FIBERS.
- UNLESS OTHERWISE SPECIFIED, COUPLER MARKING TO BE LABELED WITH 'CANSTAR', CANSTAR PART DESCRIPTOR, AND SERIAL NUMBER.
- SEE SHEET 2 FOR PART NUMBER ORDERING INFORMATION.
- SEE SHEET 3 FOR CANSTAR PART DESCRIPTORS.
- SEE SHEET 4 & 5, TABLE A-1 & A-2, FOR OPTICAL PERFORMANCE SPECIFICATIONS.
- SEE SHEET 5, TABLE B, FOR CONNECTORIZED COUPLER SPECIFICATIONS.
- CONTACT US FOR COUPLERS WITH CUSTOMER SPECIALTY FIBERS, OR WITH CUSTOM SPECS.

STANDARD SPECIFICATION	
DIRECTIVITY	> = 50dB @ nom. λ (APPLICABLE 1X2 ONLY)
THERMAL STABILITY	< = 0.002dB/1° C OVER -40° C TO +85° C (NON-CONNECTORIZED)
PDIL	< = 0.2 dB pp @ nom. λ
OPTICAL FIBER	SMF-28 TM
LEAD TYPE	∅ 2.5 mm REINFORCED JACKET - BLACK
PACKAGING STYLE	COMPACT RUGGEDIZED HOUSING

spec ref	dr asir 2012/06/08			projection 	MM [INCH]	size	A4	scale	0.750	
tolerance std	eng asir 2012/07/05					ecn no	ELX-S-012125-1			
	chr -						rel level	Released		
surface	appr John Wang 2012/07/05			product family		rev		B		
	linear	0.X	±0.3	FCi	title	COUPLER, MXN, SINGLEMODE SINGLE WINDOW, 'RP' PACKAGE				
		0.XX	±0.05							
		0.XXX	±							
angular	0°	±2°								
www.fci.com		cat. no.		Product - Customer Drw			sheet 1 of 6			

PART NUMBER ORDERING INFORMATION

← INPUT → ← OUTPUT → (SEE NOTE 1)

of Inputs
One - '1'
Two - '2'

V R P 0 0 0 0

of Outputs
Two - '2'

Fiber Type
SMF-28 TM - 'A'
Customer Supplied - '#'
Custom - 'Y'

Wavelengths
1300 nm - 'D'
1310 nm - 'E'
1550 nm - 'C'
Not Specified - 'X'

Operating Bandwidth
± 20 nm - '4'
Custom 'Z'

Coupling Ratio
99:01 - '01'
98:02 - '02'
90:10 - '10'
80:20 - '20'
70:30 - '30'
60:40 - '40'
50:50 - '50'
Custom - 'ZZ'

Polish Type
'A' - Flat
'B' - PC
'C' - SPC
'D' - UPC
'E' - APC
'X' - No Specification
'Z' - Custom

Connector Type
'A' - SMA 905
'B' - SMA 906
'C' - ST
'D' - SC
'E' - FC
'K' - LC
'#' - Customer Supplied
'X' - No Connector
'Z' - Custom

Lead Length
'0' - NA
'1' - .25 m
'2' - .50 m
'3' - .75 m
'4' - 1.00 m
'5' - 1.25 m
'6' - 1.50 m
'7' - 1.75 m
'8' - 2.00 m
'9' - 2.25 m
'A' - 2.50 m
'B' - 2.75 m
'C' - 3.00 m
'D' - 3.25 m
'E' - 3.50 m
'F' - 3.75 m
'G' - 4.00 m
'H' - 4.25 m
'I' - 4.50 m
'J' - 4.75 m
'K' - 5.00 m
'L' - 5.25 m
'M' - 5.50 m
'N' - 5.75 m
'P' - 6.00 m
'Q' - 6.25 m
'R' - 6.50 m
'S' - 6.75 m
'T' - 7.00 m
'U' - 7.25 m
'V' - 7.50 m
'W' - 7.75 m
'X' - 8.00 m
'Y' - 8.25 m
'Z' - 8.50 m
'#' - Special



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NOTES:

- ORDERING OPTIONS FOR OUTPUTS ARE IDENTICAL TO INPUTS.
- NOMINAL LEAD LENGTH: 0.55 m
- SEE SHEET 5, TABLE B, FOR CONNECTOR SPECIFICATIONS.

spec ref		dr asir 2012/06/08		projection		size A4		scale N/A	
tolerance std		eng asir 2012/07/05				$\frac{MM}{[INCH]}$		ecn no ELX-S-012125-1	
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr -						rel level Released	
surface ✓		appr John Wang 2012/07/05		product family		dwg no VRP-MXN01		rev B	
linear		0.X	±0.3			COUPLER, MXN, SINGLEMODE SINGLE WINDOW, 'RP' PACKAGE		Product - Customer Drw	
		0.XX	±0.05						
angular		0°	±2°						
		www.fci.com		cat. no.		sheet 2 of 6			

CANSTAR PART DESCRIPTOR

VRP - X - / XXX -

of Inputs
One - '01'
Two - '02'

of Outputs
Two - '02'

Wavelength
1300 nm - '130'
1310 nm - '131'
1550 nm - '155'

Tap Ratio
1% - '01'
2% - '02'
10% - '10'
20% - '20'
30% - '30'
40% - '40'
50% - '50'



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spec ref			dr	asir	2012/06/08	projection 	MM [INCH]	size	A4	scale	N/A	
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	asir			2012/07/05	ecn no	ELX-S-012125-1		
				chr	-			-		rel level	Released	
surface	linear	0.X	±0.3	appr	John Wang	2012/07/05	product family	VRP-MXN01			rev	B
		0.XX	±0.05	www.fci.com			cat. no.	Product - Customer Drw			sheet 3 of 6	
	angular	0°	±2°									

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TABLE A-1					
PART DESCRIPTOR	WAVELENGTH (nm)	COUPLING RATIO (%)	MAXIMUM EXCESS LOSS (dB)	THROUGHPORT INSERTION LOSS (dB)	TAP-PORT INSERTION LOSS (dB)
VRP-01X02-130/XXX-50	1300 ± 20	50 ± 3	0.3	3.6	3.6
VRP-01X02-130/XXX-40	1300 ± 20	40 ± 3	0.3	2.5	4.4
VRP-01X02-130/XXX-30	1300 ± 20	30 ± 3	0.2	1.8	5.6
VRP-01X02-130/XXX-20	1300 ± 20	20 ± 2	0.2	1.1	7.4
VRP-01X02-130/XXX-10	1300 ± 20	10 ± 1	0.2	0.6	11.0
VRP-01X02-130/XXX-02	1300 ± 20	2 ± 0.5	0.2	0.3	18.4
VRP-01X02-130/XXX-01	1300 ± 20	1 ± 0.2	0.2	0.2	22.0
VRP-01X02-130/XXX-50	1310 ± 20	50 ± 3	0.3	3.6	3.6
VRP-01X02-131/XXX-40	1310 ± 20	40 ± 3	0.3	2.5	4.4
VRP-01X02-131/XXX-30	1310 ± 20	30 ± 3	0.2	1.8	5.6
VRP-01X02-131/XXX-20	1310 ± 20	20 ± 2	0.2	1.1	7.4
VRP-01X02-131/XXX-10	1310 ± 20	10 ± 1	0.2	0.6	11.0
VRP-01X02-131/XXX-02	1310 ± 20	2 ± 0.5	0.2	0.3	18.4
VRP-01X02-131/XXX-01	1310 ± 20	1 ± 0.2	0.2	0.2	22.0
VRP-01X02-155/XXX-50	1550 ± 20	50 ± 3	0.3	3.6	3.6
VRP-01X02-155/XXX-40	1550 ± 20	40 ± 3	0.3	2.5	4.4
VRP-01X02-155/XXX-30	1550 ± 20	30 ± 3	0.2	1.8	5.6
VRP-01X02-155/XXX-20	1550 ± 20	20 ± 2	0.2	1.1	7.4
VRP-01X02-155/XXX-10	1550 ± 20	10 ± 1	0.2	0.6	11.0
VRP-01X02-155/XXX-02	1550 ± 20	2 ± 0.5	0.2	0.3	18.4
VRP-01X02-155/XXX-01	1550 ± 20	1 ± 0.2	0.2	0.2	22.0

spec ref	dr asir 2012/06/08			projection			size	A4	scale	N/A	
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng asir 2012/07/05			chr - -	ecn no	ELX-S-012125-1		
	surface	linear	0.X						±0.3	appr John Wang 2012/07/05	product family
0.XX			±0.05	www.fci.com	cat. no.	Product - Customer Drw	sheet 4 of 6				
	0.XXX	±	FCj					title	COUPLER, MXN, SINGLEMODE SINGLE WINDOW, 'RP' PACKAGE	dwg no	VRP-MXN01
	angular	0°		±2°							



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TABLE A-2					
PART DESCRIPTOR	WAVELENGTH (nm)	COUPLING RATIO (%)	MAXIMUM EXCESS LOSS (dB)	THROUGHPORT INSERTION LOSS (dB)	TAP-PORT INSERTION LOSS (dB)
VRP-02X02-130/XXX-50	1300 ± 20	50 ± 3	0.3	3.6	3.6
VRP-02X02-130/XXX-40	1300 ± 20	40 ± 3	0.3	2.5	4.4
VRP-02X02-130/XXX-30	1300 ± 20	30 ± 3	0.2	1.8	5.6
VRP-02X02-130/XXX-20	1300 ± 20	20 ± 2	0.2	1.1	7.4
VRP-02X02-130/XXX-10	1300 ± 20	10 ± 1	0.2	0.6	11.0
VRP-02X02-130/XXX-02	1300 ± 20	2 ± 0.5	0.2	0.3	18.4
VRP-02X02-130/XXX-01	1300 ± 20	1 ± 0.2	0.2	0.2	22.0
VRP-02X02-130/XXX-50	1310 ± 20	50 ± 3	0.3	3.6	3.6
VRP-02X02-131/XXX-40	1310 ± 20	40 ± 3	0.3	2.5	4.4
VRP-02X02-131/XXX-30	1310 ± 20	30 ± 3	0.2	1.8	5.6
VRP-02X02-131/XXX-20	1310 ± 20	20 ± 2	0.2	1.1	7.4
VRP-02X02-131/XXX-10	1310 ± 20	10 ± 1	0.2	0.6	11.0
VRP-02X02-131/XXX-02	1310 ± 20	2 ± 0.5	0.2	0.3	18.4
VRP-02X02-131/XXX-01	1310 ± 20	1 ± 0.2	0.2	0.2	22.0
VRP-02X02-155/XXX-50	1550 ± 20	50 ± 3	0.3	3.6	3.6
VRP-02X02-155/XXX-40	1550 ± 20	40 ± 3	0.3	2.5	4.4
VRP-02X02-155/XXX-30	1550 ± 20	30 ± 3	0.2	1.8	5.6
VRP-02X02-155/XXX-20	1550 ± 20	20 ± 2	0.2	1.1	7.4
VRP-02X02-155/XXX-10	1550 ± 20	10 ± 1	0.2	0.6	11.0
VRP-02X02-155/XXX-02	1550 ± 20	2 ± 0.5	0.2	0.3	18.4
VRP-02X02-155/XXX-01	1550 ± 20	1 ± 0.2	0.2	0.2	22.0

spec ref		dr	asir	2012/06/08	projection 	MM [INCH]	size	A4	scale	N/A	
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	asir	2012/07/05			ecn no	ELX-S-012125-1			
		chr	-	-			rel level	Released			
		appr	John Wang	2012/07/05	product family						
surface	linear	0.X	±0.3		FCi	title	COUPLER, MXN, SINGLEMODE SINGLE WINDOW, 'RP' PACKAGE	dwg no	VRP-MXN01	rev	B
		0.XX	±0.05							www.fci.com	cat. no.
	angular	0°	±2°								



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A

B

C

D

A

B

C

D

TABLE B			
CONNECTOR TYPE	POLISH TYPE	INSERTION LOSS / CONNECTOR (dB)	BACK REFLECTION (dB)
ST	PC	< = 0.35	> 40
	SPC	< = 0.35	> 45
	UPC	< = 0.35	> 50
	APC	Not Specified	Not Specified
FC	PC	< = 0.35	> 40
	SPC	< = 0.35	> 45
	UPC	< = 0.35	> 50
	APC	< = 0.5	> 60
SC	PC	< = 0.35	> 40
	SPC	< = 0.35	> 45
	UPC	< = 0.35	> 50
	APC	< = 0.5	> 60
LC	PC	< = 0.35	> 40
	SPC	< = 0.35	> 45
	UPC	< = 0.35	> 50
	APC	< = 0.5	> 60

NOTES:

- 1. PLEASE REFER TO COUPLER SPECIFICATION FOR INSERTION LOSS VALUES, AND ADD CONNECTOR INSERTION LOSS FROM TABLE.
- 2. LEAD LENGTH TOLERANCE: +10cm / -0cm OF NOMINAL LENGTH.
- 3. TEMPERATURE RANGE: -20° C TO +70° C



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spec ref		dr asir 2012/06/08		projection 	MM [INCH]	size A4	scale N/A
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED					ecn no ELX-S-012125-1	
						rel level Released	
surface ✓		appr John Wang 2012/07/05		product family		rev B	
	linear	0.X	±0.3	www.fci.com	cat. no.	Product - Customer Drw	sheet 6 of 6
		0.XX	±0.05				
		0.XXX	±				
	angular	0°	±2°	title COUPLER, MXN, SINGLEMODE SINGLE WINDOW, 'RP' PACKAGE		dwg no VRP-MXN01	