

Ø 5,6 TYP
[0.22]



0,5 TYP
[0.02]

INPUT

INPUT 2

PRODUCT MARKING
SEE NOTE 2

FIBER MARKING
SEE NOTE 1

INPUT 1

1.0 m TYP
(nom.)

60 TYP
[2.36]

TAP

MMQ-01X02

FIBER MARKING
SEE NOTE 1

THROUGHPUT

TAP

FIBER MARKING
SEE NOTE 1

THROUGHPUT

MMQ-02X02

NOTES:

- 'TAP' & 'INPUT 2' FIBERS WILL BE MARKED IN BLACK IMMEDIATELY AFTER THE EXIT OF THE FIBER FROM THE HOUSING TUBE END FOR APPROXIMATELY 6 INCHES LONG. THERE IS NO MARKING ON 'THROUGHPUT' & 'INPUT 1' FIBERS.
- UNLESS OTHERWISE SPECIFIED, COUPLER MARKING TO BE LASER-MARKED 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

COUPLING	TESTED UNDER FULLY FILLED LAUNCH CONDITIONS	
WAVELENGTH	600nm TO 1600nm, TESTED @ 850nm OR 1300nm AS SPECIFIED	
DIRECTIVITY	> = 40dB @ 850nm (APPLICABLE 1X2 ONLY)	
THERMAL STABILITY	< = 0.002dB/1° C OVER -40° C TO +85° C (NON-CONNECTORIZED)	
TYPICAL UNIFORMITY	SPLITTERS	< = 1.0dB
	TAPS	NA
LEAD TYPE	BARE, ACRYLATE COATED	
PACKAGING STYLE	T304 STAINLESS STEEL TUBE	

spec ref	dr asir 2012/05/18			projection 	size A4	scale 1.000		
tolerance std	eng asir 2012/07/04						MM [INCH]	ecn no ELX-S-012112-1
	chr - -							
surface ✓	appr John Wang 2012/07/04			product family	dwg no MMQ-MXN01	rev B		
	TOLERANCES UNLESS OTHERWISE SPECIFIED			title COUPLER, MXN, MULTIMODE 'MQ' PACKAGE				
	linear	0.X	±0.3	www.fci.com			cat. no.	Product - Customer Drw
	0.XX	±0.05						
angular	0°	±2°						



PART NUMBER ORDERING INFORMATION

← INPUT → ← OUTPUT → (SEE NOTE 1)

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

MMQ 00 00

of Outputs
Two - '2'

Fiber Coating
Acrylate Coating - 'G'
Customer Supplied - '#'
Custom - 'Y'

Wavelength
850nm - 'A'
1300nm - 'D'
Not Specified - 'X'

Fiber Specification
050/125 - '0'
062/125 - '1'
100/140 - '3'
200/240 - '5'
Customer Supplied - '#'
Custom - 'Z'

Coupling Ratio
95:05 - '05'
90:10 - '10'
80:20 - '20'
70:30 - '30'
60:40 - '40'
50:50 - '50'
etc.:etc. - 'etc.'
Custom - 'ZZ'

Polish Type
'A' - Flat
'B' - PC
'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

NOTES:

- ORDERING OPTIONS FOR OUTPUTS ARE IDENTICAL TO INPUTS.
- NOMINAL LEAD LENGTH: 1.0 m

spec ref		dr	asir	2012/05/18	projection 	MM [INCH]	size	A4	scale	N/A			
tolerance std		eng	asir	2012/07/04			ecn no	ELX-S-012112-1					
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr	-	-			rel level	Released					
surface	linear	0.X	±0.3		FCj	title	COUPLER, MXN, MULTIMODE 'MQ' PACKAGE			dwg no	MMQ-MXN01	rev	B
		0.XX	±0.05										
		0.XXX	±										
	angular	0°	±2°		www.fci.com	cat. no.	Product - Customer Drw			sheet 2 of 6			

CANSTAR PART DESCRIPTOR

MMQ - X - / -

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

of Outputs
Two - '02'

Core Diameter
50 um - '050'
62.5 um - '062'
100 um - '100'
200 um - '200'

Cladding Diameter (um)
125 um - '125'
140 um - '140'
240 um - '240'

Tap Ratio
5% - '05'
6% - '06'

50% - '50'

Tested Wavelength
850nm (Default) - 'NONE'
1300nm - 'D'



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spec ref		dr asir 2012/05/18		projection 	MM [INCH]	size A4	scale N/A
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED					ecn no ELX-S-012112-1	
						rel level Released	
surface <input checked="" type="checkbox"/>	linear	0.X	±0.3	product family		dwg no MMQ-MXN01	rev B
		0.XX	±0.05				
		0.XXX	±	www.fci.com		Product - Customer Drw	
angular	0°	±2°	cat. no.				

TABLE A-1

PART DESCRIPTOR	WAVELENGTH (nm)	COUPLING RATIO (%)	MAXIMUM EXCESS LOSS (dB)	THROUGHPUT INSERTION LOSS (dB)		COUPLEDPORT INSERTION LOSS (dB)	
				MAXIMUM	MINIMUM	MAXIMUM	MINIMUM
MMQ-01X02-050/125-50	850	50 ± 5	0.75	4.1	3.0	4.1	3.0
MMQ-01X02-050/125-40	850	40 ± 5	0.75	3.4	2.0	5.3	3.6
MMQ-01X02-050/125-30	850	30 ± 5	0.75	2.6	1.4	6.8	4.7
MMQ-01X02-050/125-20	850	20 ± 3	0.75	1.9	0.9	8.5	6.5
MMQ-01X02-050/125-10	850	10 ± 2	0.75	1.3	0.5	11.7	9.3
MMQ-01X02-050/125-05	850	05 ± 2	0.75	1.1	0.2	16.0	11.7
MMQ-01X02-062/125-50	850	50 ± 5	0.75	4.1	3.0	4.1	3.0
MMQ-01X02-062/125-40	850	40 ± 5	0.75	3.4	2.0	5.3	3.6
MMQ-01X02-062/125-30	850	30 ± 5	0.75	2.6	1.4	6.8	4.7
MMQ-01X02-062/125-20	850	20 ± 3	0.75	1.9	0.9	8.5	6.5
MMQ-01X02-062/125-10	850	10 ± 2	0.75	1.3	0.5	11.7	9.3
MMQ-01X02-062/125-05	850	05 ± 2	0.75	1.1	0.2	16.0	11.7
MMQ-01X02-100/140-50	850	50 ± 5	0.75	4.1	3.0	4.1	3.0
MMQ-01X02-100/140-40	850	40 ± 5	0.75	3.4	2.0	5.3	3.6
MMQ-01X02-100/140-30	850	30 ± 5	0.75	2.6	1.4	6.8	4.7
MMQ-01X02-100/140-20	850	20 ± 3	0.75	1.9	0.9	8.5	6.5
MMQ-01X02-100/140-10	850	10 ± 2	0.75	1.3	0.5	11.7	9.3
MMQ-01X02-100/140-05	850	05 ± 2	0.75	1.1	0.2	16.0	11.7
MMQ-01X02-200/240-50	850	50 ± 5	0.75	4.1	3.0	4.1	3.0
MMQ-01X02-200/240-40	850	40 ± 5	0.75	3.4	2.0	5.3	3.6
MMQ-01X02-200/240-30	850	30 ± 5	0.75	2.6	1.4	6.8	4.7
MMQ-01X02-200/240-20	850	20 ± 3	0.75	1.9	0.9	8.5	6.5
MMQ-01X02-200/240-10	850	10 ± 2	0.75	1.3	0.5	11.7	9.3
MMQ-01X02-200/240-05	850	05 ± 2	0.75	1.1	0.2	16.0	11.7

spec ref		dr asir 2012/05/18		projection 	MM [INCH]	size A4	scale N/A
tolerance std		eng asir 2012/07/04				ecn no ELX-S-012112-1	
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr -				rel level Released	
appr John Wang 2012/07/04		product family		dwg no MMQ-MXN01		rev B	
surface	linear	0.X ±0.3	0.XX ±0.05	title COUPLER, MXN, MULTIMODE 'MQ' PACKAGE		www.fci.com	
	angular	0° ±2°		cat. no.		Product - Customer Drw	
						sheet 4 of 6	



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TABLE A-2

PART DESCRIPTOR	WAVELENGTH (nm)	COUPLING RATIO (%)	MAXIMUM EXCESS LOSS (dB)	THROUGHPUT INSERTION LOSS (dB)		COUPLEDPORT INSERTION LOSS (dB)	
				MAXIMUM	MINIMUM	MAXIMUM	MINIMUM
MMQ-02X02-050/125-50	850	50 ± 5	0.75	4.1	3.0	4.1	3.0
MMQ-02X02-050/125-40	850	40 ± 5	0.75	3.4	2.0	5.3	3.6
MMQ-02X02-050/125-30	850	30 ± 5	0.75	2.6	1.4	6.8	4.7
MMQ-02X02-050/125-20	850	20 ± 3	0.75	1.9	0.9	8.5	6.5
MMQ-02X02-050/125-10	850	10 ± 2	0.75	1.3	0.5	11.7	9.3
MMQ-02X02-050/125-05	850	05 ± 2	0.75	1.1	0.2	16.0	11.7
MMQ-02X02-062/125-50	850	50 ± 5	0.75	4.1	3.0	4.1	3.0
MMQ-02X02-062/125-40	850	40 ± 5	0.75	3.4	2.0	5.3	3.6
MMQ-02X02-062/125-30	850	30 ± 5	0.75	2.6	1.4	6.8	4.7
MMQ-02X02-062/125-20	850	20 ± 3	0.75	1.9	0.9	8.5	6.5
MMQ-02X02-062/125-10	850	10 ± 2	0.75	1.3	0.5	11.7	9.3
MMQ-02X02-062/125-05	850	05 ± 2	0.75	1.1	0.2	16.0	11.7
MMQ-02X02-100/140-50	850	50 ± 5	0.75	4.1	3.0	4.1	3.0
MMQ-02X02-100/140-40	850	40 ± 5	0.75	3.4	2.0	5.3	3.6
MMQ-02X02-100/140-30	850	30 ± 5	0.75	2.6	1.4	6.8	4.7
MMQ-02X02-100/140-20	850	20 ± 3	0.75	1.9	0.9	8.5	6.5
MMQ-02X02-100/140-10	850	10 ± 2	0.75	1.3	0.5	11.7	9.3
MMQ-02X02-100/140-05	850	05 ± 2	0.75	1.1	0.2	16.0	11.7
MMQ-02X02-200/240-50	850	50 ± 5	0.75	4.1	3.0	4.1	3.0
MMQ-02X02-200/240-40	850	40 ± 5	0.75	3.4	2.0	5.3	3.6
MMQ-02X02-200/240-30	850	30 ± 5	0.75	2.6	1.4	6.8	4.7
MMQ-02X02-200/240-20	850	20 ± 3	0.75	1.9	0.9	8.5	6.5
MMQ-02X02-200/240-10	850	10 ± 2	0.75	1.3	0.5	11.7	9.3
MMQ-02X02-200/240-05	850	05 ± 2	0.75	1.1	0.2	16.0	11.7

spec ref		dr asir 2012/05/18		projection 	MM [INCH]	size A4	scale N/A	
tolerance std		eng asir 2012/07/04				ecn no ELX-S-012112-1		
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr -				rel level Released		
appr John Wang 2012/07/04		product family			dwg no MMQ-MXN01			
surface <input checked="" type="checkbox"/>	linear	0.X ±0.3	title COUPLER, MXN, MULTIMODE 'MQ' PACKAGE www.fci.com cat. no.		Product - Customer Drw sheet 5 of 6		rev B	
		0.XX ±0.05						
	angular	0° ±2°						



TABLE B			
CONNECTOR TYPE	POLISH TYPE	INSERTION LOSS / CONNECTOR (dB)	BACK REFLECTION (dB)
ST	FLAT	< = 0.5	Not Specified
	PC	< = 0.35	Please contact manufacturer for details
FC	FLAT	< = 0.5	Not Specified
	PC	< = 0.35	Please contact manufacturer for details
SC	FLAT	< = 0.5	Not Specified
	PC	< = 0.35	Please contact manufacturer for details
LC	FLAT	< = 0.5	Not Specified
	PC	< = 0.35	Please contact manufacturer for details
SMA 905	FLAT	< = 1.0	Not Specified
SMA 906	FLAT	< = 1.0	Not Specified

NOTES:

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

spec ref		dr asir 2012/05/18		projection 	MM [INCH]	size A4	scale N/A
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED					ecn no ELX-S-012112-1	
	eng asir 2012/07/04						rel level Released
chr -		appr John Wang 2012/07/04		product family			
surface ✓	linear	0.X	±0.3	FCi	title COUPLER, MXN, MULTIMODE 'MQ' PACKAGE	dwg no MMQ-MXN01	rev B
		0.XX	±0.05				
		0.XXX	±				
angular	0°	±2°	www.fci.com	cat. no.	Product - Customer Drw		sheet 6 of 6

