

## Optical characteristics Fiber Collimator Array FCA 101

Parameter	Symbol	Conditions	Nominal	Tol.	Unit
Wavelength	$\lambda$		1545	$\pm 35$	nm
<b>Lenses:</b>					
Common focal length	f		2.54	$\pm 0.25$	mm
$\Delta f$ between lenses	$\Delta f$		< 0.01		
Clear Aperture	CA	-	0.9	+0.01/-0	mm
Number of beams	N		10		
Beams pitch	$p_b$	@ waist position	1.000	$\pm 0.015$	mm
Beams linearity (non-cumulative)	$l_b$	@ waist position	-	$\pm 0.01$	mm
Waist position	$z_w$	@ min. divergence condition	2.54		mm
<i>Beam diameter</i> (Gaussian fit) at: - waist position:	$d_{w\_e2}$	@ $1/e^2$ -power level	0.48	$\pm 0.024$	mm
<i>Half Divergence Angle</i> (indicated as reference)	$\alpha$		< 5		mrad
<i>Relative Pointing Error</i> (non-cumulative)	$\Delta PE$		< 0.1		°
<i>Insertion Loss</i>	IL	Collimator to collimator; working distance: 5.08 mm (= 2.f, i.e. mirror @ f)	typical 0.25 (10x)	max 0.5 (10x)	dB
Polarisation Dependent Loss	PDL		< 0.025		dB
Back Reflection	BR	-	< - 50		dB
Fiber		Corning SMF-28			

Jan 8, 2005

