


## High Broad Band Multi-mode Fiber

Items	Description	Typical Value	
 Optical Characteristics	Attenuation Coefficient @850 nm	$\leq 2.3$ dB/km	
		@1300 nm	$\leq 0.7$ dB/km
	Band Width @850nm	$\geq 2000$ MHz·Km	
	Effective Group Index of Refraction @850 nm	1.484	
		@1300 nm	1.479
	Macro-bending Loss (100turns, $\Phi 75$ mm) @850 nm	$\leq 0.4$ dB	
	(100turns, $\Phi 75$ mm) @1300 nm	$\leq 0.4$ dB	
Dimensional Characteristics	Fiber Core Diameter	$50 \pm 2.5$ $\mu$ m	
	Cladding Diameter	$125 \pm 1$ $\mu$ m	
	Core/Clad Concentricity	$\leq 1$ $\mu$ m	
	Cladding Non-Circularity	$\leq 1.0\%$	
	Coating Diameter	$243 \pm 5$ $\mu$ m	
	Cladding/Coating Concentricity	$\leq 6$ $\mu$ m	
	Coating Non-circularity	$\leq 6.0\%$	
Mechanical Characteristics	Tensile Strength (15% Weibull Probability) (10m Gauge length) (50% Weibull Probability)	2.76 GPa 3.45 GPa	
	Fatigue Resistance Parameter ( $N_d$ )	$\geq 20$	
	Peak Coating Strip Force	1.3~8.9 N	
Environmental Characteristics	Temperature Cycling Induced Attenuation (-60°C ~ +85°C) @850nm, 1300 nm	$\leq 0.1$ dB/km	
	Damp Heat Dependence Induced Attenuation (+85 $\pm$ 2°C, 85%RH, 30days) @850nm, 1300 nm	$\leq 0.2$ dB/km	
	Temperature-humidity Cycling Induced Attenuation (-10~85°C, 90%RH) @850nm, 1300 nm	$\leq 0.2$ dB/km	
	Water-soak dependence Induced Attenuation (23 $\pm$ 2°C, 30days) @850nm, 1300 nm	$\leq 0.2$ dB/km	