

Attenuation

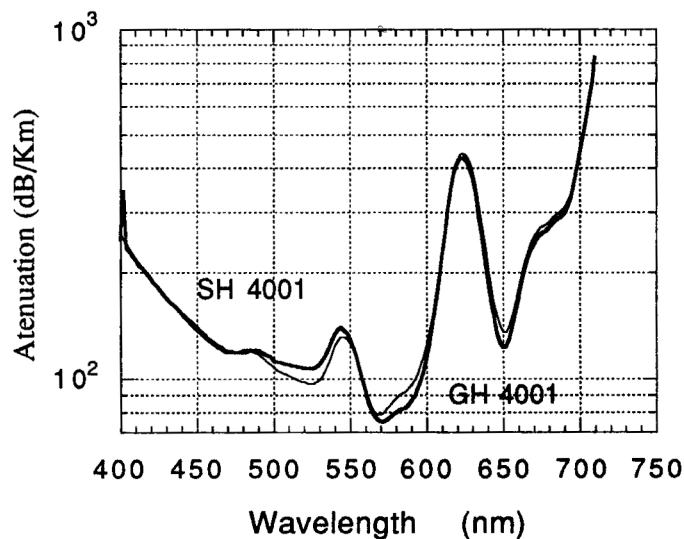
Attenuation Spectrum

In PMMA, the lowest absorption window is located around 570 nm, and the second lowest at 650 nm as shown in the graph. In polycarbonate, the lowest moves up to around 780 nm.

Attenuation is so sensitive to fiber manufacturing conditions that even in the same spool the loss figures fluctuate. Therefore, products manufactured with long experience are recommended.

Measurement condition also greatly influence the loss, so it is advisable to measure at the same conditions if more than two figures are to be compared for discussion.

Figure 6.1 Attenuation Spectrum of Cables of PMMA Core Fiber



Measurement conditions:

Light source	: Monochrome light
Cut back length	: 25m-5m
Samples	: Eska SH4001 (cable), GH4001 (cable)

Light Transmission

PMMA

The graph shows light transmission of PMMA between ultraviolet and near infrared wavelength, from 200 nm to 2,600 nm. Ultraviolet rays are a very popular energy source for curing devices in the chemical industry, while near infrared rays are the most popular light sources in optical fiber communication.

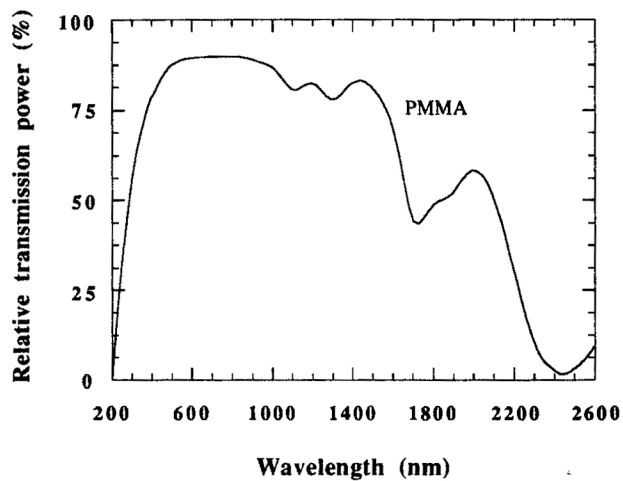


Figure 5.1 Light Transmission of PMMA between UV and near IR