

Note 1. Estimated CO2 reduction if a portion of GOF is replaced by POF:

Assuming that the energy required for manufacturing POF is approximately one-sixth compared to GOF, it is estimated that if more than 1/3 of the annual domestic production of GOF were replaced with POF, this change would result in a CO2 reduction effect of 146,000 tons, roughly equivalent to 100,000 KL of crude oil, which could be expected to contribute to the mitigation of global warming. Japan has announced that it aims to reduce greenhouse gas emissions by 46% (compared to 2013) by 2030, and the more widespread of POF become, the more CO2 emissions can be reduced.

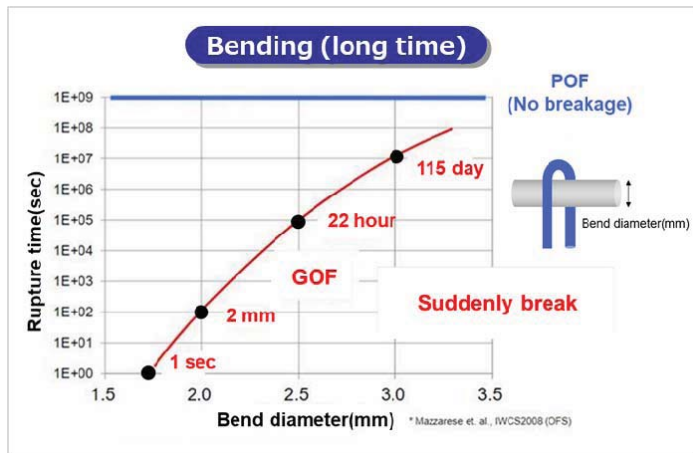


Fig.1 Time to fracture based on diameter of U-shaped bending GOF and POF.

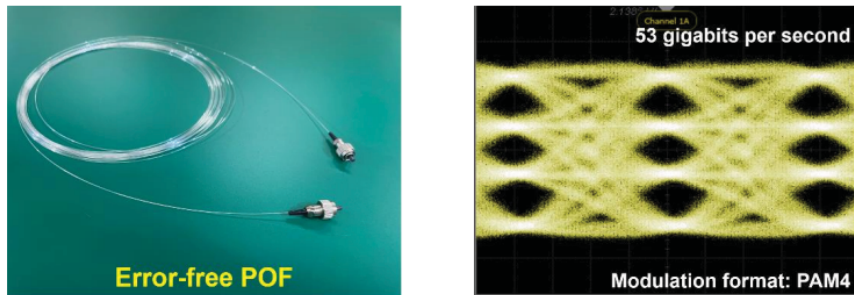


Fig. 2 Photograph of “Error-Free POF” (left) and its eye pattern at 53 Gbps transmission.

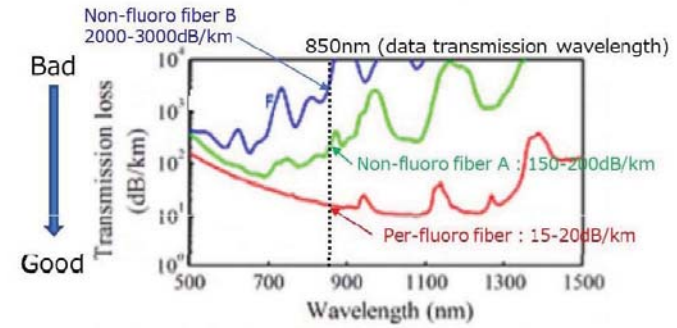


Fig. 3 Transmission loss due to material dispersion of perfluorinated GI-POF and others