

Fig. 5 Temperature dependency on bending strength

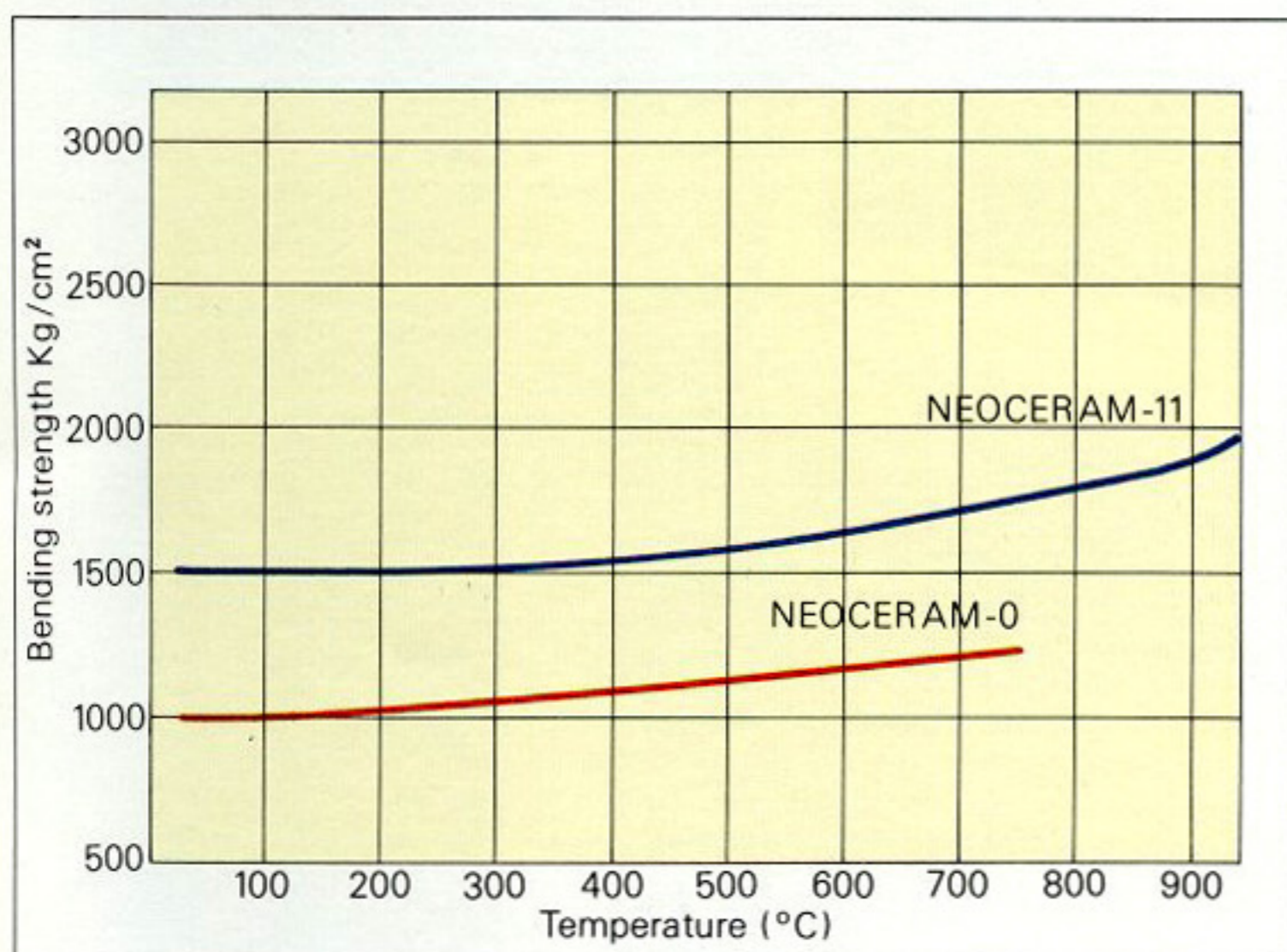
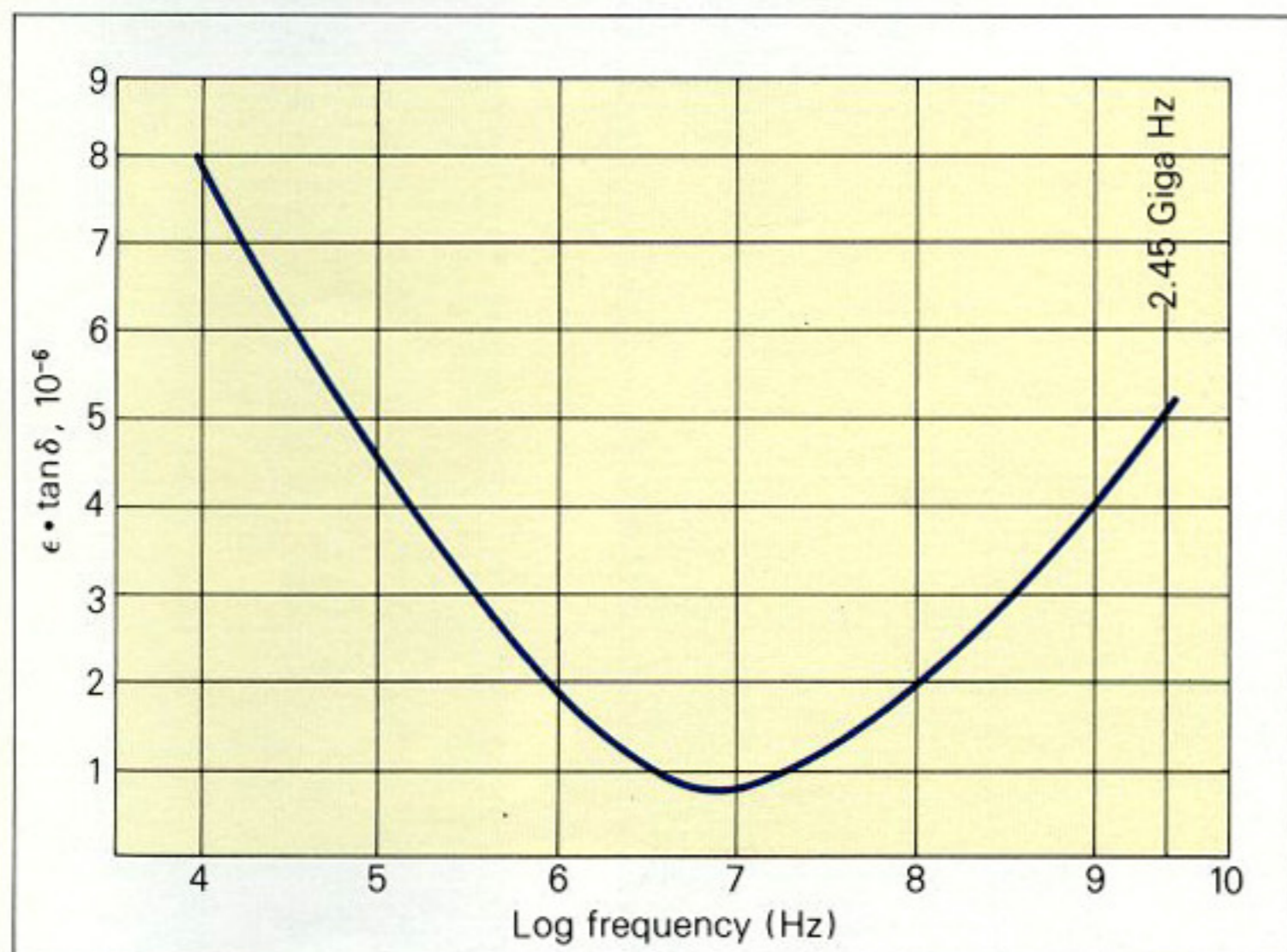


Fig. 6 High frequency loss of NEOCERAM-11 (25°C)



NEOCERAM-11 has excellent thermal shock resistance because its thermal expansion coefficient is very low ($11 \times 10^{-7}/^{\circ}\text{C}$)—about one-third the value of ordinary heat resistant glass (see Table on page 3). And the high thermal endurance of NEOCERAM-11 is seen from that the maximum service temperature is 1100°C for continuous use.

NEOCERAM-11 has such mechanical properties as bending strength and impact strength that excel over those of NEOCERAM-0 (see Table on page 3). As shown in Fig. 5, the bending strength of NEOCERAM-11 increases with rising temperature up to 1100°C , which makes it possible to use NEOCERAM-11 for the tube-covered heating coil of the electric oven.

Fig. 7 Transmittance of NEOCERAM-0

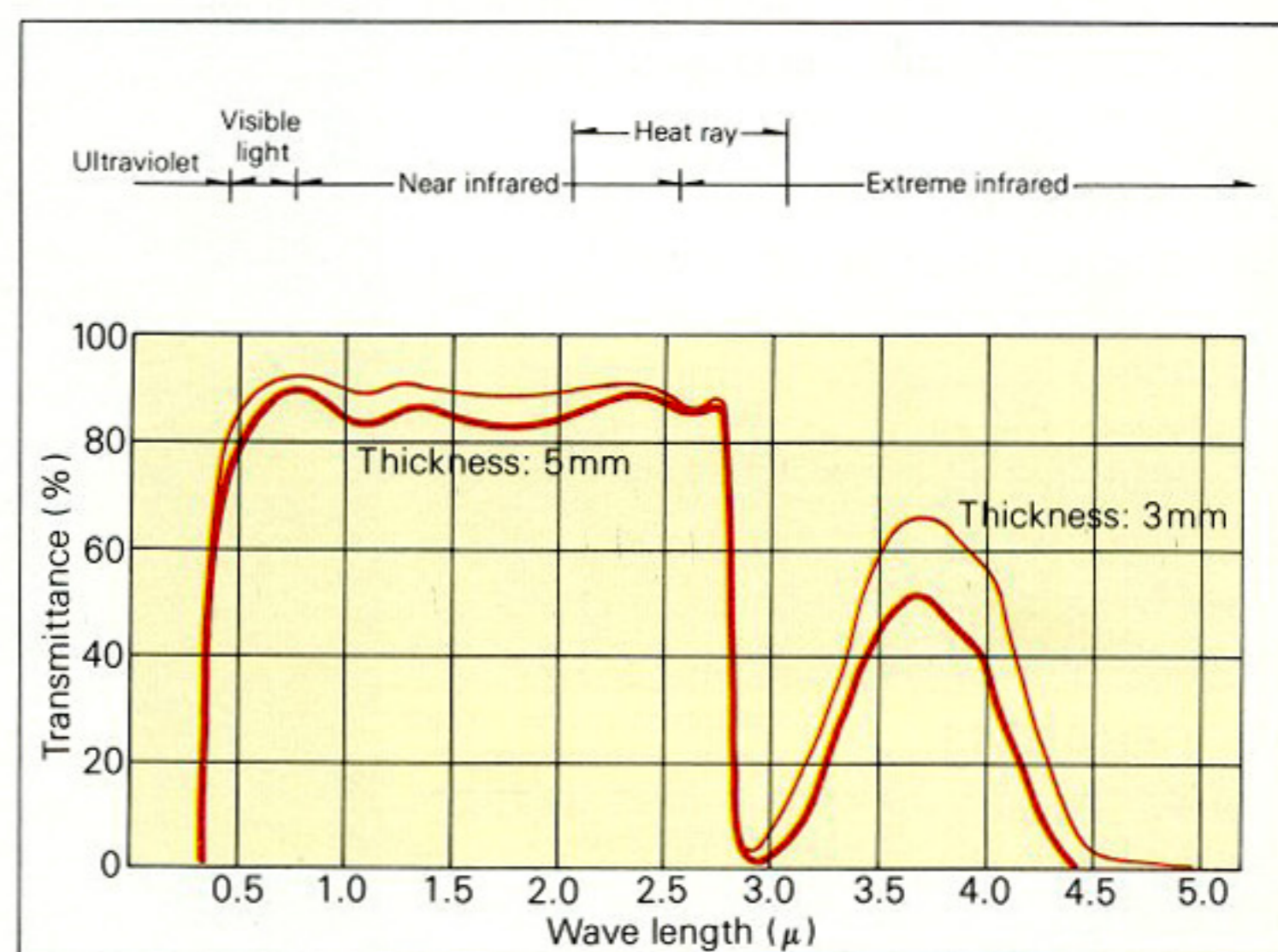
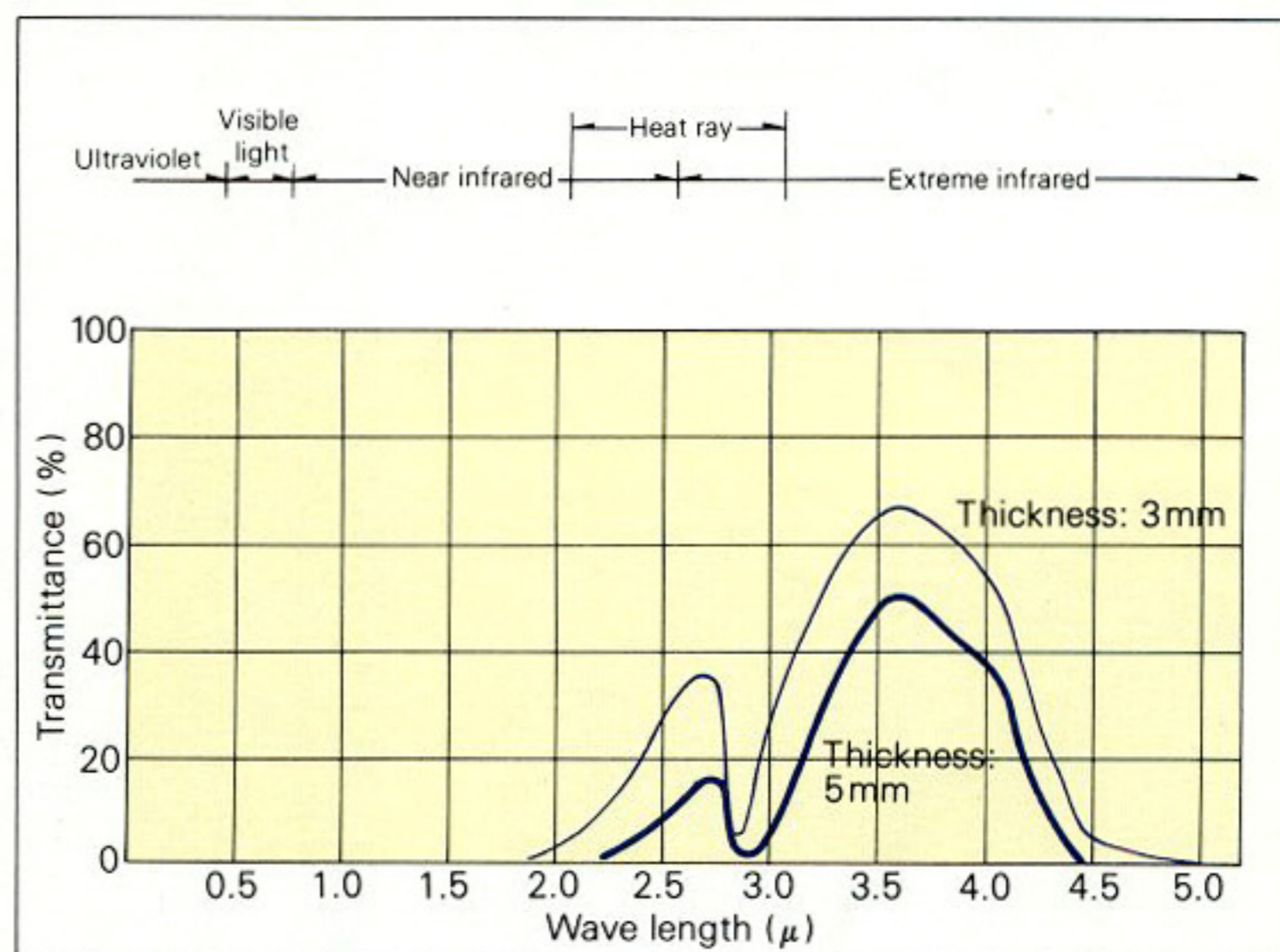


Fig. 8 Transmittance of NEOCERAM-11



NEOCERAM-11 has a fairly low level of high frequency loss at 2.45 Giga Hz ($10^{9.39}\text{Hz}$) specified for the microwave oven (see Fig. 6). Combined with its excellent thermal shock resistance and thermal endurance, NEOCERAM-11 is widely used as trays and shelves for microwave ovens.