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**No. 1C-b92  $\text{Pb}(\text{Sc}_{1/2}\text{Nb}_{1/2})\text{O}_3$ – $\text{Pb}(\text{Yb}_{1/2}\text{Nb}_{1/2})\text{O}_3$** 

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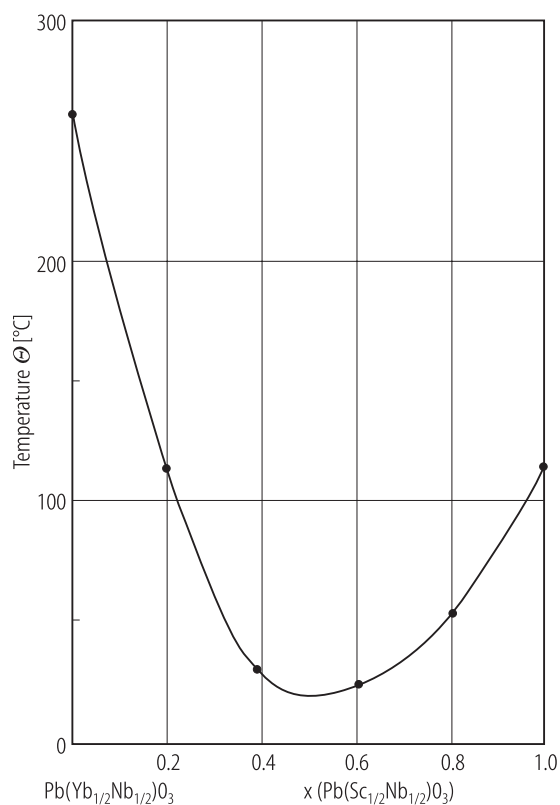
**1b** Transition temperature: Fig. 1C-b92-001.

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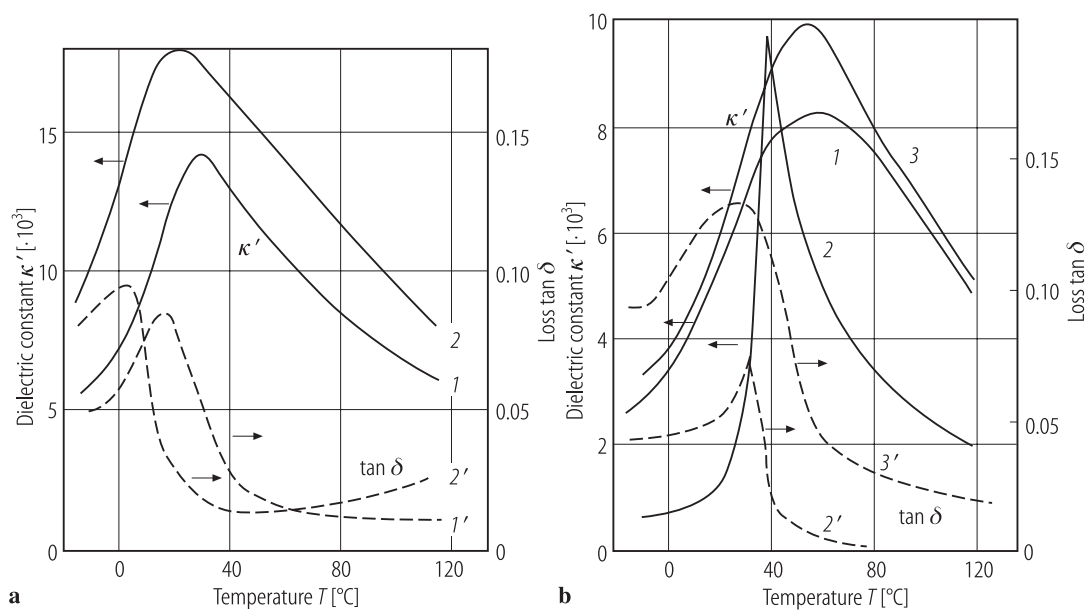
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**5a** Dielectric constant: Fig. 1C-b92-002.

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**Fig. 1C-b92-001.**  $(1-x)\text{Pb(Yb}_{1/2}\text{Nb}_{1/2}\text{)O}_3 \cdot x \text{ Pb(Sc}_{1/2}\text{Nb}_{1/2}\text{)O}_3$ .  $\Theta$  vs.  $x$  [90Bok].  $\Theta$ : temperature corresponding to  $\kappa$  maximum of ceramics at 1.6 kHz.



**Fig. 1C-b92-002.**  $(1-x)\text{Pb}(\text{Yb}_{1/2}\text{Nb}_{1/2})\text{O}_3 \cdot x \text{Pb}(\text{Sc}_{1/2}\text{Nb}_{1/2})\text{O}_3$  (ceramics).  $\kappa'$ ,  $\tan \delta$  vs.  $T$  [90Bok].  $f = 1.6 \text{ kHz}$ .  
**(a)**  $x = 0.4$ . Annealing condition: 1, 1': at 1000  $^{\circ}\text{C}$  for 105 h; 2, 2': at 1000  $^{\circ}\text{C}$  for 105 h and at 1240  $^{\circ}\text{C}$  for 20 min.  
**(b)**  $x = 0.8$ . Annealing condition: 1: at 1240  $^{\circ}\text{C}$  for 20 min; 2, 2': at 1240  $^{\circ}\text{C}$  for 20 min and at 1000  $^{\circ}\text{C}$  for 380 h; 3, 3': at 1240  $^{\circ}\text{C}$  for 20 min, at 1000  $^{\circ}\text{C}$  for 380 h and again at 1240  $^{\circ}\text{C}$  for 20 min.

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**Reference**

- 90Bok    Bokov, A.A., Raevskii, I.P., Shonov, V.Yu.: *Izv. Akad. Nauk SSSR, Neorg. Mater.* **26** (1990) 2371; *Inorg. Mater. (English Transl.)* **26** (1990) 2033.