

# High Infrared-Absorbing Glass Tubes (for Reed Switches)

We supply high infrared-absorbing glass tubes for use of reed switches.

## Features

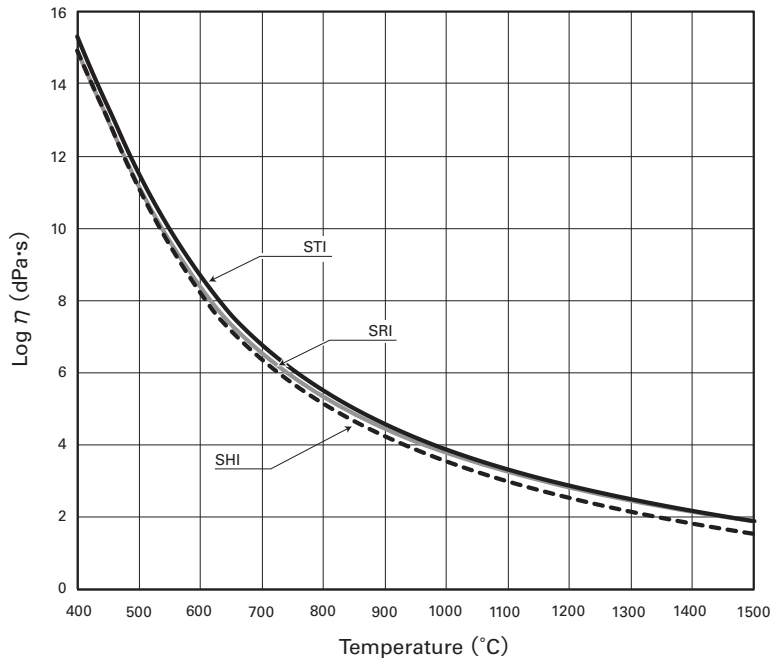
- High rate of infrared absorbance  
(It is possible to heat local areas for sealing by halogen lamp or laser-irradiation.)
- STI and SRI have excellent sealing characteristics with 52 Ni-Fe alloy, and SHI is excellent with Co-Fe alloy.
- We can supply "ultra-short glass tubes" as short as 3.0mm in length.
- We can supply "one-side sealed glass," which can be adjusted to fulfill the required need for airtightness.
- Pb-free



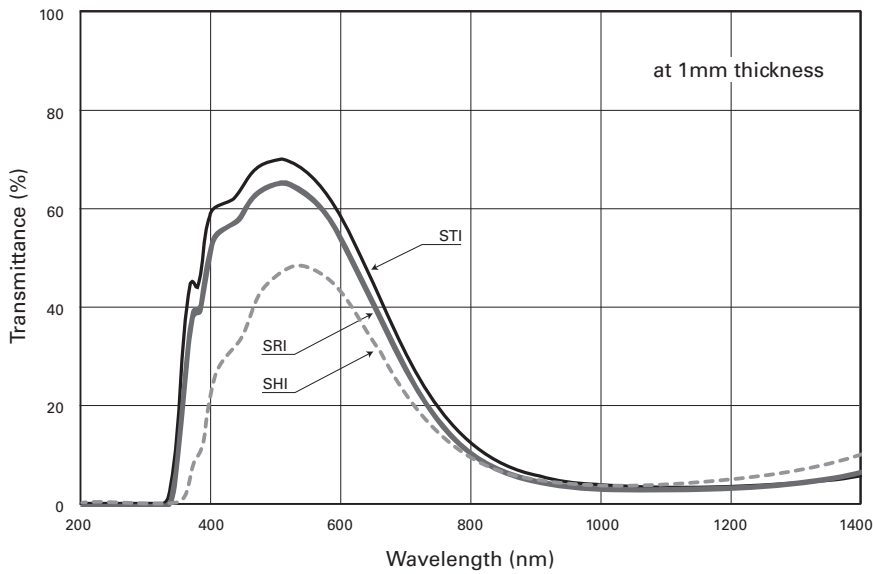
## Properties

Properties/Glass Code			STI	SRI	SHI
Coefficient of thermal expansion	30-380°C	$\times 10^{-7}/K$	94	92.5	119.5
Density		$\times 10^3\text{kg/m}^3$	2.53	2.54	2.67
Strain point		°C	420	410	410
Annealing point		°C	460	450	450
Softening point		°C	650	635	625
Working point		°C	980	965	930
Hydrolytic resistance	JIS R3502	R <sub>2</sub> O mg	0.6	0.5	0.5
Volume resistivity Log $\rho$	150°C	$\Omega\cdot\text{cm}$	12.2	10.3	10.6
	250°C	$\Omega\cdot\text{cm}$	9.3	7.7	8.0
Color			Green	Green	Green
Transmittance	$\lambda = 1050\text{nm}$ , t=1mm	%	$\leq 5$	$\leq 5$	$\leq 5$
Glass type			K <sub>2</sub> O·BaO·SiO <sub>2</sub>	Na <sub>2</sub> O·BaO·SiO <sub>2</sub>	Na <sub>2</sub> O·K <sub>2</sub> O·ZnO·SiO <sub>2</sub>
Sealing metal			52 Ni-Fe Alloy		Co-Fe Alloy

## Viscosity



## Transmittance



## Standard Dimensions

(mm)

Glass Code	Outer Diameter	Wall Thickness	Length
STI	1.70 ± 0.05	0.25 ± 0.05	3.0-50.0
	2.05 ± 0.05	0.23 ± 0.05	
	2.50 ± 0.05	0.40 ± 0.05	10.0-50.0
	4.95 ± 0.10	0.64 ± 0.10	
	6.00 ± 0.20	0.60 ± 0.10	
SRI	2.40 ± 0.05	0.32 ± 0.05	10.0-50.0
	3.07 ± 0.05	0.47 ± 0.05	
SHI	2.50 ± 0.05	0.35 ± 0.05	17.0-22.0

Other dimensions are available upon request.