

SPECIFICATIONS

2781 HIGH-PRECISION STANDARD RESISTOR

Nominal Value: 1Ω.

Construction: Double-sealed brass container with 4-terminal construction.

Accuracy to Nominal Value: ±20ppm at 20±0.2°C, power consumption of less than 0.02W, 4-terminal connection, and in stirred oil.

Calibrated Limit of Error: ±2ppm at 20±0.2°C, power

consumption of less than 0.02W, 4-terminal connection, and in stirred oil.

Power Rating: Less than 1W.

Dimensions: Approx. 120dia. × 183mm (4-5/8 dia. × 7-1/8").

Weight: Approx. 3.1kg (6.8 lbs).

Attached Document: Test certificate . . . 1 copy.

2794 STANDARD RESISTORS

Code	Nominal Value	Terminal Construction	Accuracy	Calibrated Limit of Error	Temperature Coefficient		Insulation Resistance (at 0 to 40°C)	Dielectric Strength (between resistor and the case)
			at 20±0.2°C, less than 0.1W, in stirred oil		$\alpha_{20} (\times 10^{-6}/^{\circ}\text{C})$	$\beta (\times 10^{-6}/^{\circ}\text{C}^2)$		
279403	0.1Ω	4-terminal	±0.002%	±0.0005%	-2 to +8	Less than -0.7	More than 10 ¹⁰ Ω at 500V DC	1,500V AC for one minute
279404	1Ω							
279405	10Ω							
279406	100Ω							

Temperature Coefficient — Change of resistance with temperature is expressed by the following equation:

$$R_t = R_{20} [1 + \alpha_{20} (t - 20) + \beta (t - 20)^2]$$

where,

R_t ; resistance at $t^{\circ}\text{C}$,

R_{20} ; resistance at 20°C

Self-Heating: Less than 6°C/W at 20°C.

Change of Resistance with Temperature: Within ±20 ppm at 20±2°C.

Temperature Coefficient: At an ambient temperature from 15 to 35°C.

Change of Resistance with Power: Within ±20 ppm against power fluctuations from 0.1 to 0.7W at 20±2°C, in air.

Power Rating: 3W.

Change of Resistance with Time: Within ±5 ppm for six months (within YOKOGAWA'S test period).

Dimensions: Approx. 174 × 150mm (6-7/8" × 5-7/8) 104mm dia. (4-4/8" dia.).

Weight: Approx. 1.5kg (3.3 lbs).

Attached Document: Test certificate . . . 1 copy (includes measured data at 20°C, change of resistance with temperature from 15 to 35°C, and change of resistance with time for one year).

2792 STANDARD RESISTORS

Code	Nominal Value	Terminal Construction	Accuracy (at 20±1°C)	Calibrated Limit of Error (at 20±0.2°C)	Temperature Coefficient		Insulation Resistance (at 0 to 40°C)	Dielectric Strength (between resistor and the case)
					$\alpha_{20} (\times 10^{-6}/^{\circ}\text{C})$	$\beta (\times 10^{-6}/^{\circ}\text{C}^2)$		
279201	0.001Ω	4-terminal	±0.02 %	±0.01 %	-5 to +15	Less than -0.7	More than 10 ¹⁰ Ω at 500V DC	1,500V AC for one minute
279202	0.01Ω		±0.01 %	±0.005%	-5 to +15	Less than -0.7		
279203	0.1Ω		±0.005%	±0.001%	-5 to +10	Less than -0.7		
279204	1Ω		±0.005%	±0.001%	-5 to +10	Less than -0.7		
279205	10Ω		±0.005%	±0.001%	-5 to +10	Less than -0.7		
279206	100Ω		±0.005%	±0.001%	-5 to +10	Less than -0.7		
279207	1kΩ		±0.005%	±0.001%	-5 to +10	Less than -0.7		
279208	10kΩ	±0.005%	±0.001%	-5 to +10	Less than -0.7	More than 10 ¹² Ω at 1,000V DC	2,000V AC for one minute	
279209	100kΩ	±0.005%	±0.002%	-10 to +10	Less than -0.05			
279210	1MΩ	±0.01 %	±0.005%	-10 to +10	Less than -0.05			

Temperature Coefficient — Change of resistance with temperature is expressed by the following equation:

$$R_t = R_{20} [1 + \alpha_{20} (t - 20) + \beta (t - 20)^2]$$

where,

R_t ; resistance at $t^{\circ}\text{C}$,

R_{20} ; resistance at 20°C

Power Rating: 3W.

Dimensions: Approx. 174 × 150mm (6-7/8" × 5-7/8) 104mm dia. (4-4/8" dia.).
 Approx. 104dia×147mm (279209, 279210)

Weight: Approx. 1.5kg (3.3 lbs).

Attached Document: Test certificate 1 copy.