

## Pt100-SMD1206 series

## SMD type thin film platinum resistor

## **MAIN FEATURES**

Front and back penetrating electrodes 3.2mm Thermal sensitive thin film 1.6mm 0.7mm Ceramic substrate

\*The nominal resistance measurement point is 8mm away from the component body



**TECHNICA** L INDEX

<ul> <li>SMD type thin film platinum resistor is a universal temperature sensor</li> </ul>	
component with the advantages of small volume, wide temperature	
measurement range, good long-term stability, and high structural strength.	

Compared to NTC products, SMD thin film platinum resistors have the advantthe advantages of high s strength, high output linearity, good repeatability, and high temperature measurement accuracy.

Compared to lead type thin film platinum resistors, the cost is significantly . reduced, and various welding processes such as tin soldering, reflow soldering, and wave soldering can be used, greatly expanding the application range.

• Widely used in fields such as instrumentation, household appliances, new energy vehicles, and electronic equipment.

Performance parameters	SMD type thin film platinum resistor			
Lead specifications	3.2mmx1.6mmx0.7mm			
R0°C resistance value	100Ω			
Temperature coefficient (TCR)	3850ppm/°C			
Measuring range	-50°C~+200°C			
Long term stability	Drift of R0 $^{\circ}$ C within 200 $^{\circ}$ C and 1000 hours $\leq 0.04\%$			
Welding terminals	Tin alloy terminals			
Welding method	Reflow soldering or wave soldering, recommended to use high- temperature solder paste, welding temperature 230-240 ° C			

## **Resistance temperature characteristics**

Temperature (°C) I	Resistance( $\Omega$ )	Temperature (°C)	Resistance( $\Omega$ )	Temperature (°C)	Resistance( $\Omega$ )	Temperature (°C) Resistance(Ω	
-20	92.16	40	115.54	100	138.51	160	161.05
0	100.00	60	123.24	120	146.07	180	168.48
20	107.79	80	130.90	140	153.58	200	175.86

<b>O</b>	Туре	Range of application	Classes	$R_0(\Omega)$	Temperature range	Accuracy
REFERENC E SELECTION	Pt100-SMD 1206-A	-50~+200°C	А	100±0.06	0~+150°C	±(0.15+0.002 T )
	Pt100-SMD 1206-B		В	100±0.12	-50~+200°C	±(0.3+0.005 T )
	Pt100-SMD 1206-2B		2B	100±0.24	-50~+200°C	±(0.6+0.01 T )

Note \*: the marked classes and temperature measurement accuracy refer to the IEC60751 standard. T is the measured temperature.