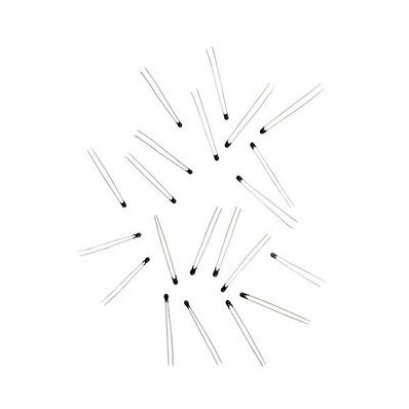
MF52-202F3470FBCP Thermistor Temperature Sensor with 3mW/.C Dissipation Factor

Our Product Introduction

Basic Information

- Place of Origin: SHENZHEN GUANGDONG,CHINA
- Brand Name: SOCAY
- Certification: UL,REACH,ROHS,ISO
- Model Number: MF52-502F3950FBCP
- Minimum Order Quantity: 500PCS
- Price: Negotiable
- Packaging Details: Bulk
- Delivery Time: 5-7 days
- Payment Terms: T/T,Paypal,Western Union,Money gram
- Supply Ability: 250,0000PCS Per Month



Product Specification

- Features: MF52 Pearl-Shape Temperature Measurement NTC Thermistor
- Dissipation Factor(mW/ :3
- B Constant (25/50)(K): 3950±1%
- Application: Temperature Measurement
- Thermal Time Constant(s): 12
- Operating Ambient Temperature( ): -40 ~ +125
- Type: MF52-502F3950FBCP
- Highlight: **MF52-202F3470FBCP Thermistor Temperature Sensor** , **MF52-202F3470FBCP**

More Images

Product Description

Product Description:

One of the key features of this thermistor is its negative temperature coefficient resistor (NTC) property, which means that its resistance decreases as the temperature increases. This characteristic makes it an ideal choice for temperature sensing applications where high accuracy and precision are required. The MF52-CP series MF52-502F3950FBCP thermistor has an operating ambient temperature range of -40 ~ +125 , making it suitable for use in harsh environments.
The MF52-CP series thermistor has a resistance of 5±1% at 25 , which is an important parameter for accurate temperature measurement. The B constant of this thermistor is 3950±1% at 25/50 , which represents the temperature sensitivity of the thermistor. This parameter is essential for accurate temperature measurement in a wide range of applications.
The MF52-CP Serise MF52-502F3950FBCP Pearl-Shape Temperature Measurement NTC Thermistor is a versatile and reliable temperature sensor that is commonly used in temperature measurement applications such as temperature controllers, thermostats, and temperature sensors. Its high accuracy and stability make it an ideal choice for applications where precise and reliable temperature measurement is required.

Features:

Product Name: NTC Thermistor

Application: Temperature Measurement

B Constant(25/85)(K): --

Resistance(25)(kΩ): 5±1%

Brand Name: SOCAY

B Constant (25/50)(K): 3950±1%

This NTC Thermistor is a thermally sensitive device that can be used as a temperature sensor. It is a type of negative temperature coefficient resistor that changes its resistance based on the temperature of the surrounding environment. This product is manufactured by the brand SOCAY and has a resistance of 2±1% at 25 and a B constant of 3470±1% at 25/50 .

Technical Parameters:

Type	MF52-CP Serise
Thermal Time Constant(s)	12
Resistance(25)(kΩ)	5±1%
B Constant (25/50)(K)	3950±1%
Part Number	MF52-502F3950FBCP
Material	CP Wire
Standard	RoHS & Halogen Free (HF) Compliant
Brand Name	SOCAY
Features	MF52 Pearl-Shape Temperature Measurement NTC Thermistor
Operating Ambient Temperature( )	-40 ~ +125

This is a technical table for a thermistor temperature sensor, also known as a thermometric resistor or thermistor. The product is a MF52-CP Serise MF52-502F3950FBCP NTC thermistor with a thermal time constant of 12 seconds, a resistance of 5±1% kΩ at 25 , and a B constant of 3950±1% K at 25/50 . The part number is MF52-502F3950FBCP and it is made of CP wire. It is RoHS & Halogen Free (HF) Compliant and is branded by SOCAY. The features of this product include a pearl-shaped design for temperature measurement, and it can operate in an ambient temperature range of -40 ~ +125 .

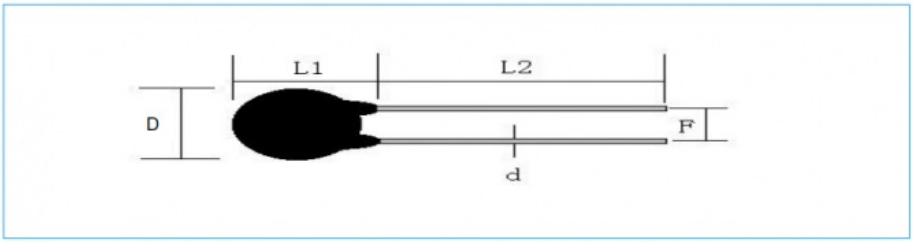
Applications:

Manufactured in SHENZHEN GUANGDONG, CHINA, this top-quality thermistor is certified with UL, REACH, ROHS, and ISO, ensuring that it meets the highest standards of quality and safety. With a minimum order quantity of 500PCS and a negotiable price, the MF52-CP Series MF52-502F3950FBCP NTC Thermistor is the perfect solution for both small and large-scale applications.
The MF52-CP Series NTC Thermistor can be used in a wide range of applications, including temperature sensing, compensation, and control in a variety of industries. Some of the most common applications for this thermistor include temperature measurement in electronic devices, industrial equipment, and automotive applications.
With a thermal time constant of just 12 seconds and a dissipation factor of 3mW/ , the MF52-CP Series MF52-502F3950FBCP NTC Thermistor is highly responsive and can accurately measure temperature changes in real-time. This makes it ideal for use in applications where quick and accurate temperature measurements are critical.
The MF52-CP Series MF52-502F3950FBCP NTC Thermistor is also incredibly versatile, with a wide range of supply voltages and resistance values available. This makes it easy to find the perfect thermistor for your specific application, no matter what your requirements may be.

In terms of packaging, the MF52-CP Series NTC Thermistor is available in bulk packaging, with a delivery time of just 5-7 days. Payment terms include T/T, Paypal, Western Union, and Money Gram, making it easy and convenient to purchase this high-quality thermistor. Overall, the SOCAY MF52-CP Series MF52-502F3950FBCP NTC Thermistor is an excellent choice for anyone in need of a reliable and accurate temperature measurement solution. Whether you're working in electronics, automotive, or industrial applications, this thermistor is sure to meet your needs and exceed your expectations.

Customization:

Structure and Dimensions (Unit: mm)



D (Max)	L1 (±1.0)	L2 (Min)	d (+0.1)	F (+0.5)
3.0	3.5	20	0.4 customizable	2.0 customizable

Part Number Code

MF52 - 103 F 3950 F B CP

(1) (2) (3) (4) (5) (6) (7)

(1) MF52: NTC Thermistor.
(2) 103: Nominal Zero-Power Resistance at 25℃: 222=2.2kΩ; 103=10kΩ.
(3) F: Tolerance of Resistance: F: ±1%; H: ±3%; J: ±5%.
(4) 3950: B Constant: 3950=3950K.
(5) F: Tolerance of B Constant: F: ±1%.
(6) B: B Constant Calculation Method: A: 25℃ & 85℃; B: 25℃ & 50℃.
(7) CP: CP Wire.

Electrical Characteristics

Part Number	Resistance (25℃) (kΩ)	B Constant (25/50℃) (K)	B Constant (25/85℃) (K)	Dissipation Factor (mW/℃)	Thermal Time Constant (s)	Operating Ambient Temperature (℃)
MF52-202F3470FBCP	2±1%	3470±1%	--	3	12	-40~+125
MF52-202F3550FBCP	2±1%	3550±1%	--	3	12	-40~+125
MF52-202F3580FBCP	2±1%	3580±1%	--	3	12	-40~+125
MF52-202F3950FBCP	2±1%	3950±1%	--	3	12	-40~+125
MF52-502F3470FBCP	5±1%	3470±1%	--	3	12	-40~+125
MF52-502F3950FBCP	5±1%	3950±1%	--	3	12	-40~+125
MF52-103F3380FBCP	10±1%	3380±1%	--	3	12	-40~+125
MF52-103F3435FACP	10±1%	--	3435±1%	3	12	-40~+125
MF52-103F3470FBCP	10±1%	3470±1%	--	3	12	-40~+125
MF52-103F3450FACP	10±1%	--	3450±1%	3	12	-40~+125
MF52-103F3950FBCP	10±1%	3950±1%	--	3	12	-40~+125
MF52-103F3977FACP	10±1%	--	3977±1%	3	12	-40~+125
MF52-103F4100FBCP	10±1%	4100±1%	--	3	12	-40~+125
MF52-153F3950FBCP	15±1%	3950±1%	--	3	12	-40~+125
MF52-203F3950FBCP	20±1%	3950±1%	--	3	12	-40~+125
MF52-503F3950FBCP	50±1%	3950±1%	--	3	12	-40~+125
MF52-503F3990FBCP	50±1%	3990±1%	--	3	12	-40~+125
MF52-503F4050FBCP	50±1%	4050±1%	--	3	12	-40~+125
MF52-104F3950FBCP	100±1%	3950±1%	--	3	12	-40~+125
MF52-104F3990FBCP	100±1%	3990±1%	--	3	12	-40~+125
MF52-104F4200FBCP	100±1%	4200±1%	--	3	12	-40~+125

Storage Conditions of Products

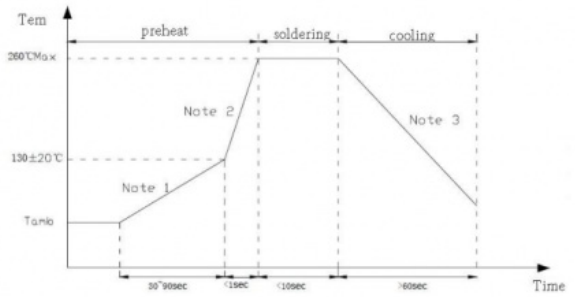
- Storage Conditions:
  Storage Temperature: -10℃ ~ +40℃.
  Relative Humidity: ≤75%RH.
  Keep Away From Corrosive Atmosphere and Sunlight.
- Period of Storage: 1 Year.

Reliability

Test Description	Standard	Test Condition	Test Requirement
Solder Ability	IEC 60068-2-20	245 ± 3℃, 3 ± 0.3 secs.	Above 95% in the terminal surface shall be with new solder
Resistance to Soldering Heat	IEC 60068-2-20	260±5℃, 10±1 secs.	No visible damage △R25/R25≤±3%
Low Temperature Storage	IEC 60068-2-1	-40±5℃, 1000±24 hrs.	No visible damage △R25/R25≤±3%
High Temperature Storage	IEC 60068-2-2	125±5℃, 1000±24 hrs.	No visible damage △R25/R25≤±3%
Damp Heat, Steady State	IEC 60068-2-78	40±2℃, 90～95%RH, 1000±24 hrs.	No visible damage △R25/R25≤±3%

Recommended Welding Conditions

Wave Soldering Curve



Note 1: (1~3)℃/sec.
Note 2: 200℃/sec.
Note 3: 5℃/sec max.

Heavy Soldering Conditions

Project	Condition
Soldering Iron Head Temperature	360℃ (max)
Weld Time	3 secs. (max)
Distance Between Welding Position and Coating Layer	2 mm (min)

Packing Specification

Part Number	Quantity
MF52-CP Series	500 pcs/bag

Warning

- SOCAY owns the rights to a number of patents, trademarks, copyrights, trade secrets, and other intellectual property.
- SOCAY reserves the right to make changes without further notice to any products herein.
- SOCAY makes no warranties, representations or warranties as to the fitness of its products for any particular purpose, and disclaims any liability.
- The parameters provided in the SOCAY datasheet specification may vary from application to application, and the actual performance may vary over time. All operating parameters must be verified by the customer's technical expert before application.
- Any and all responsibilities and liabilities are disclaimed if any item under this notice of warning is not complied with.

Support and Services:

The NTC Thermistor product provides technical support and services to ensure optimal performance and reliability. Our team of experts is available to assist with product selection, installation, calibration, and troubleshooting. We also offer custom design services to meet unique application requirements. Additionally, we provide comprehensive documentation, including datasheets, application notes, and user guides. Our goal is to provide exceptional support and services to ensure customer satisfaction and success.

SOCAY Shenzhen Socay Electronics Co., Ltd.

+8618126201429 sylvia@socay.com socaydiode.com

4/F, Block C, HeHengXing Science & Technology Park, 19 MinQing Road, LongHua District, Shenzhen City, GuangDong Province, China