

EMI Shielding Film WSLDM85B

SUMMARY

The new generation of WSLDM85B electromagnetic shielding film has natural product vision, no distortion of dynamic and static objects, and the shielding film has no grid feeling and no color difference. Innovatively optimized in both the selection of metal mesh width and the grid angle arrangement, which can ensure high shielding efficiency meanwhile obtaining maximum light transmittance. The change of material structure promotes the shielding film minimize the occurrence of interference fringes on the LCD surface. New structural scheme effectively protects the metal grid. The strengthened treatment of the surface of the polyester film enables the shielding film to achieve 3H anti scratch.

一、 PRODUCT INTRODUCTION

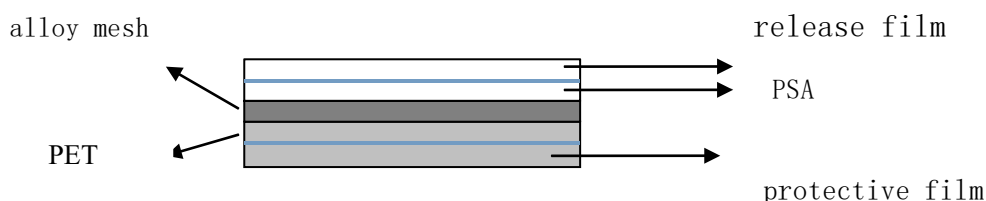
1、 Physical Parameter

WSLDM85B electromagnetic shielding film is produced by silk screen and laminated technology. It has high shielding efficiency and light transmittance. It can be easily applied to existing display screens and touch screens. The special structure treatment and scratch resistance function meet the shielding requirements of construction projects. Highly transparent and undistorted visual enable it is preferred material for window shielding. Thicker wire diameters are reserved on both sides of the film during the production process to facilitate grounding treatment.

NO	Performance	Data	Remark
1	Transmittance	>80%	3M Transmission Meter
2	Haze	<2%	
3	Mesh Width	17UM	
4	Mesh Spacing	238UM	
5	Metal Material	Copper Nickel Alloy	Double-sided carbonization
6	Grid Angle	45 °	

2、 Product Structure Diagram

WSLDM85B shielding film improves the structure of the film. The alloy wire mesh is layered between high transparent polyester film and pressure sensitive adhesive. The polyester film is strengthened to achieve 3H anti scratch, which has a good effect on protection for the intermediate alloy wire mesh, resist external hard objects scratch.



3、Material Thickness

Item	WSLDM85B
Shielding Layer	125±0.05um
Adhesive Layer	25UM
Protective Film	70UM
Release Film	50UM

二、Product Performance

1、Shielding Effectiveness

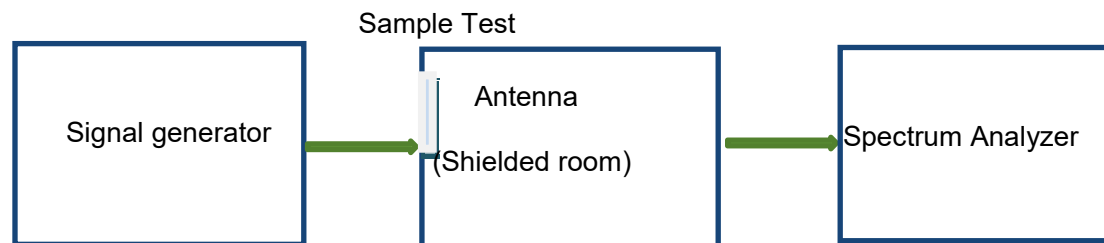
Principle: As an electromagnetic shielding product for EMI/RFI, the core function of WSLDM85B is that it contains a continuous dense alloy grid inside, which ensure excellent shielding effectiveness.

Testing Basis: GJB6190-2008 Shielding effectiveness of EMI shielding materials

Measuring Instrument: Signal generator AV1464B

Spectrum Analyzer E4407B

Detection Diagram:



SUEMI008 EMI shielding effect:

Frequency	30MHZ-1G	2G	3MHz	4G
Shielding Effectiveness (dB)	46.1	39.9	36.8	36.2

2、Internal Resistance Test Method

Put the shielding film on a dedicated internal resistance test module for testing.

Measuring Instrument: Square resistance tester

Square Resistance Tester Model: DMR-1C

Data: 0.07 Ω

The lower the resistance, the better the conductivity of the shielding film and the higher the shielding performance.

3、 Environmental Protection Characteristics

Meet environmental requirements:

Test Items	ROHS	Halogen Free	REACH1 38	Flame Retardant
Third Party Testing	SGS	SGS	CTI	UL
Test Result	Qualified	Qualified	Qualified	VTM-0

4、 Acid And Alkali Resistance

Acid-base test: prepare 2N hydrochloric acid, 10% sodium hydroxide, 10% sulfuric acid solution etc.

Sample preparation: pressing and curing the shielding film

Soak cross-cut test: Soak the sample in the solution for ultrasonic cleaning at room temperature for 10 minutes. After taking out the sample to dry, observe whether the appearance of the surface is discolored, and use 3M tape to do cross cut test.

WSLDM85B test result: All qualified.

5、 Salt Spray Resistance

Salt spray test conditions: Salt spray test chamber, 5% sodium chloride aqueous solution, temperature 35°C, 72 hours.

Sample preparation: Shielding film 100*65mm.

Evaluation items: Surface corrosion rate.

Result: salt spray corrosion rate is 0%, the result is qualified.

6、 High Temperature And Humidity Resistance

High temperature and humidity test conditions: constant temperature and humidity test box, constant temperature 65°C, constant humidity 90%RH, 7 days (requires drying 120°C*3 Hour, or 160°C*1 hour.)

Sample preparation: Shielding film pressing and curing (Shielding film internal resistance test module 10*30mm)

Evaluation item: shielding performance (resistance change)

Result: After high temperature and high humidity, the resistance of the shielding film changes less than 1%, and the result is qualified.

Product Specifications And Storage

1、 Size

1.1m*200m

2、 Storage Conditions

Original storage: storage at room temperature