

Catalog

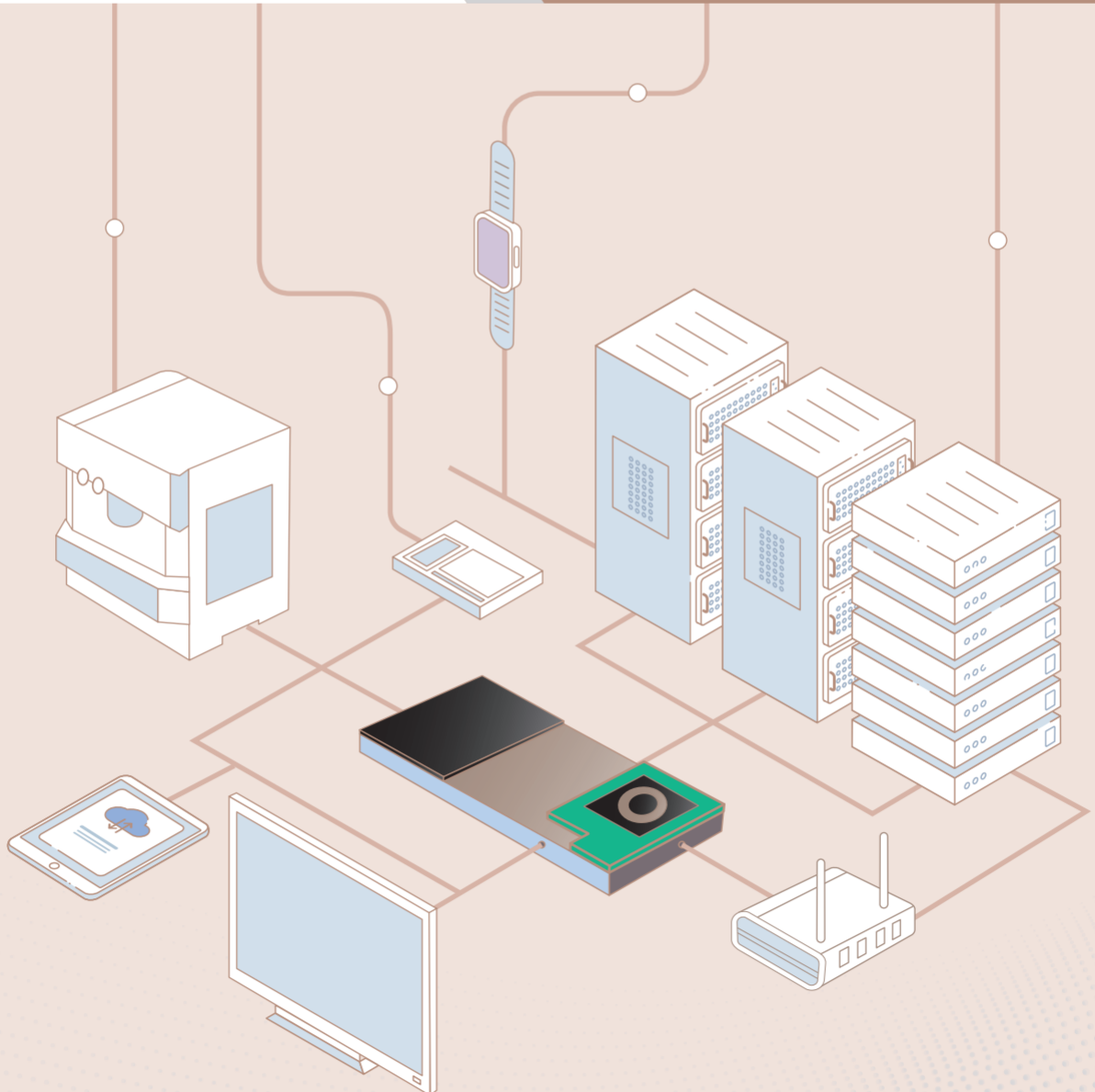
Sunlord
expert in e components

NFC PRODUCT

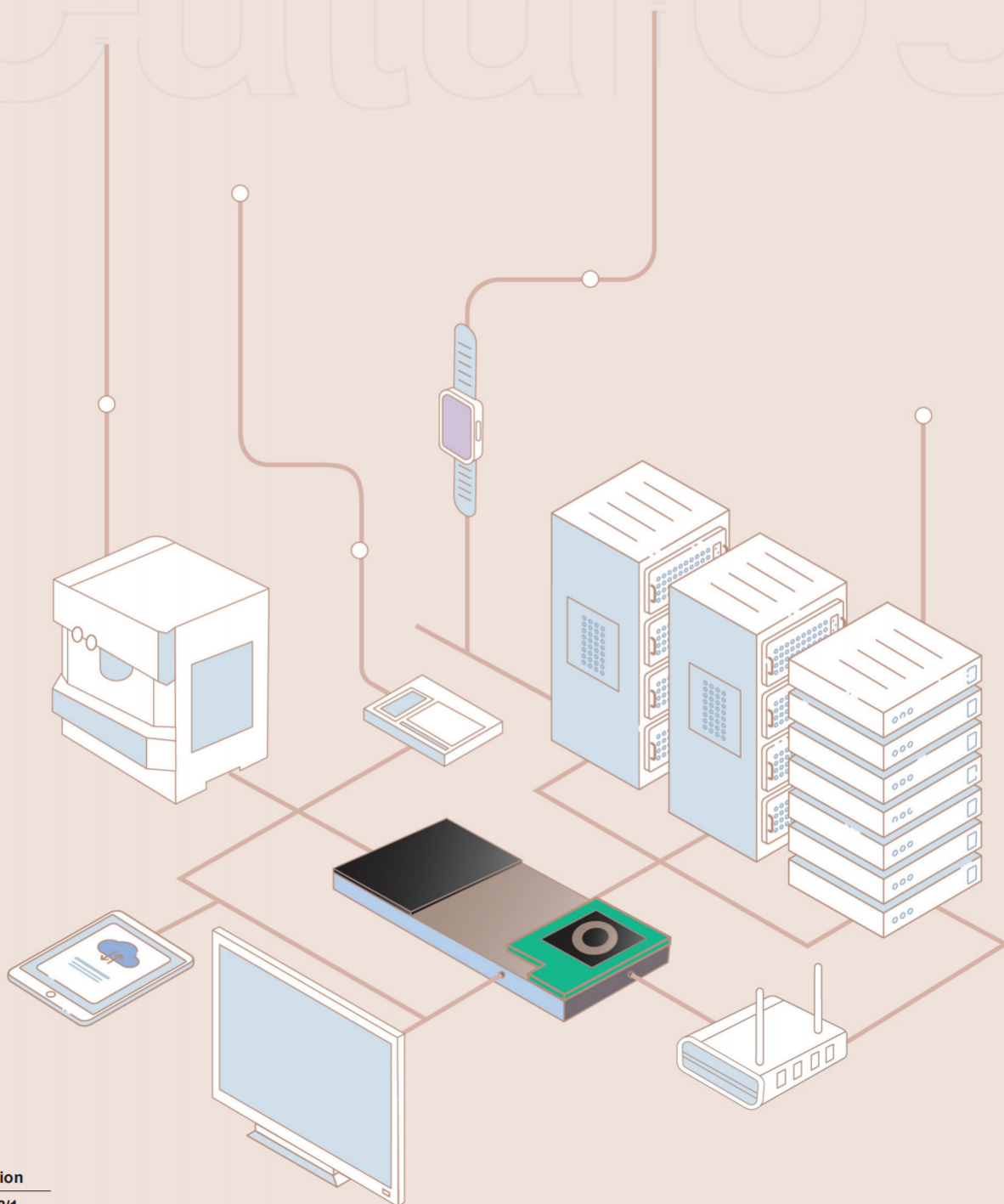
Catalog

2023-2024

Shenzhen Sunlord Electronics Co., Ltd.
www.sunlordinc.com







Notice for Sunlord Products

Product data in this Catalog are as of June 2023. They are subject to change without advance notice. Please check with our sales representatives or product engineers before ordering.

All information and data presented in this Catalog are for information only. Please contact us for detail product specification. You are requested to approve our product specification before your ordering.

This catalog contains the typical product due to the limitation of space. Please contact our sales representatives or product engineer when you didn't find the suitable product in this catalogue.

Updated information on our products is also available through the internet home page at the following address:
[Http:// www.sunlordinc.com](http://www.sunlordinc.com)

Customized

Ferrite Sheet – FS Series



Operating temp. : -40°C ~+85°C

FEATURES

- ◆ High permeability
- ◆ Low magnetic Loss
- ◆ Ultra low profile

APPLICATIONS

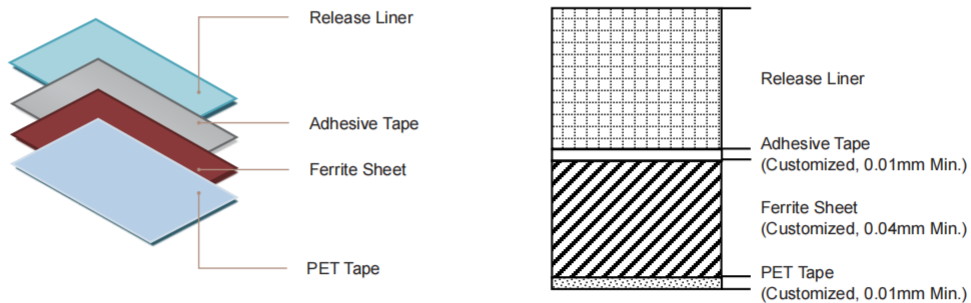
- ◆ NFC antenna
- ◆ NFC antenna for mobile phones
- ◆ Portable devices integrated NFC function with metal shield layer
- ◆ EMC magnetic material

PRODUCT IDENTIFICATION

1	2	3	4	5	6	7
FS	60W60	T14	P150	A03	B	N

1 Product Type	2 External Dimensions (L×W) (mm)	3 Total Thickness														
FS Ferrite Sheet	60W60 60×60	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Example</th> <th>Nominal Value</th> </tr> </thead> <tbody> <tr><td>T06</td><td>60um</td></tr> <tr><td>T08</td><td>80um</td></tr> <tr><td>T10</td><td>100um</td></tr> <tr><td>T12</td><td>120um</td></tr> <tr><td>T14</td><td>140um</td></tr> </tbody> </table>	Example	Nominal Value	T06	60um	T08	80um	T10	100um	T12	120um	T14	140um		
Example	Nominal Value															
T06	60um															
T08	80um															
T10	100um															
T12	120um															
T14	140um															
4 Relative Real Permeability	6 Packing	7 Application														
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>P125</td><td>125±10%</td></tr> <tr><td>P150</td><td>150±10%</td></tr> <tr><td>P180</td><td>180±10%</td></tr> </table>	P125	125±10%	P150	150±10%	P180	180±10%	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>B</td><td>Box</td></tr> <tr><td>R</td><td>Roll</td></tr> </table>	B	Box	R	Roll	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>N</td><td>NFC</td></tr> <tr><td>S</td><td>Shield</td></tr> </table>	N	NFC	S	Shield
P125	125±10%															
P150	150±10%															
P180	180±10%															
B	Box															
R	Roll															
N	NFC															
S	Shield															
5 Feature Code																
A01, A02, A03, etc.																

SHAPE AND DIMENSIONS



Sheet Size (L*W): Customized, 125×125(mm) Max.
 Thickness: 0.06~0.30mm

Ferrite Sheet – FS Series

Die Cutting Series – DC Series

Flexible NFC Antenna – MNFA/WFB Series

SPECIFICATIONS

Part Number	Permeability@13.56MHz		Thickness			
	Real	Imaginary	Total Thickness	Adhesive Tape typ.	Ferrite Sheet typ.	PET Tape typ.
Symbol	μ'	μ''	T	T1	T2	T3
Units	/	/	mm	mm	mm	mm
FS60W60T06P150A05BN	150±10%	3 Max.	0.06±0.01	0.010	0.04	0.01 (Black PET)
FS60W60T08P150A05BN	150±10%	3 Max.	0.08±0.01	0.010	0.06	0.01 (Black PET)
FS60W60T10P150A03BN	150±10%	3 Max.	0.10±0.01	0.030	0.06	0.01 (Black PET)
FS60W60T10P150A05BN	150±10%	3 Max.	0.10±0.01	0.010	0.08	0.01 (Black PET)
FS60W60T12P150A41BN	150±10%	3 Max.	0.12±0.01	0.030	0.08	0.01 (Black PET)
FS60W60T14P150A03BN	150±10%	3 Max.	0.14±0.01	0.030	0.10	0.01 (Black PET)

CUSTOMIZED
PRODUCT
PRESENTATION

We can customize Ferrite Sheet according to your requirements. Please refer to the following feature ranges:

Magnetic Permeability	
Relative Real Permeability	Customized, 180 Max.@13.56MHz
Relative Imaginary Permeability	Customized, 3~5@13.56MHz

Customized

Die Cutting Series – DC Series



Operating temp. : -40°C ~+85°C

- FEATURES**
- ◆ High permeability
 - ◆ Ultra low profile
 - ◆ Low magnetic Loss

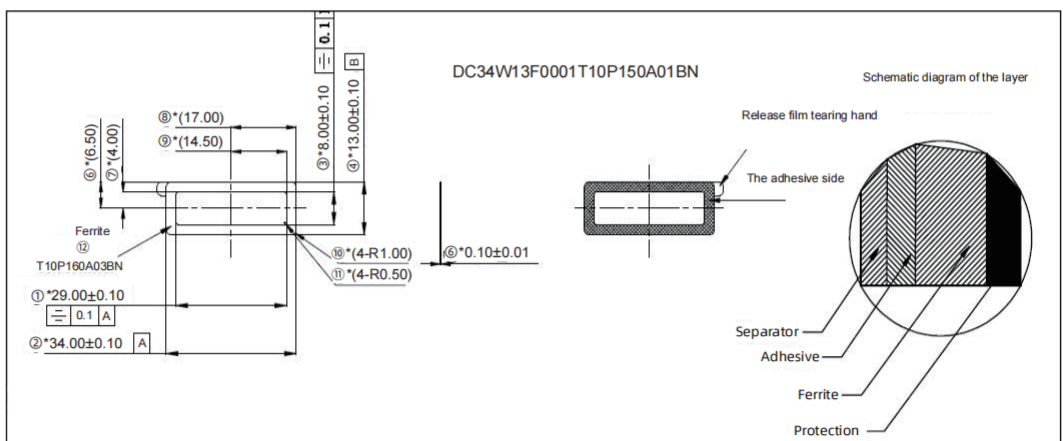
- APPLICATIONS**
- ◆ NFC antenna
 - ◆ Portable devices integrated NFC function with metal shield layer
 - ◆ NFC antenna for mobile phones
 - ◆ EMC magnetic material

PRODUCT IDENTIFICATION

1	2	3	4	5	6	7	8
DC	34W13	F0001	T10	P150	A01	B	N

<p>1 Product Type</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">DC</td> <td style="width: 50%;">Die Cutting</td> </tr> </table>	DC	Die Cutting	<p>2 External Dimensions (L×W) (mm)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">34W13</td> <td style="width: 50%;">(34±0.1) × (13±0.1)</td> </tr> </table>	34W13	(34±0.1) × (13±0.1)	<p>3 Project Code</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">F0001, F0002, etc.</td> </tr> </table>	F0001, F0002, etc.			
DC	Die Cutting									
34W13	(34±0.1) × (13±0.1)									
F0001, F0002, etc.										
<p>4 Thickness</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Example</td> <td style="width: 50%;">Nominal Value</td> </tr> <tr> <td>T10</td> <td>(100±10)um</td> </tr> </table>	Example	Nominal Value	T10	(100±10)um	<p>5 Relative Real Permeability</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">P150</td> <td style="width: 50%;">150±10%</td> </tr> </table>	P150	150±10%	<p>6 Feature Code</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">A01,A02, etc.</td> </tr> </table>	A01,A02, etc.	
Example	Nominal Value									
T10	(100±10)um									
P150	150±10%									
A01,A02, etc.										
<p>7 Packing</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">B</td> <td style="width: 50%;">Box</td> </tr> <tr> <td>R</td> <td>Roll</td> </tr> </table>	B	Box	R	Roll	<p>8 Application</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">N</td> <td style="width: 50%;">NFC</td> </tr> <tr> <td>S</td> <td>Shield</td> </tr> </table>	N	NFC	S	Shield	
B	Box									
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S	Shield									

SHAPE AND DIMENSIONS



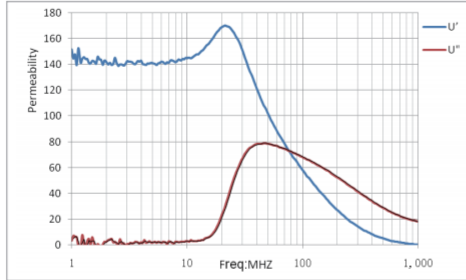
* Other shape and dimensions can be customized

SPECIFICATIONS

Part Number	DC34W13F0182T10P150A03BN
Test Frequency(f_0)	13.56 MHz
Relative Real Permeability	150±10% @13.56MHz
Relative Imaginary Permeability	5 Max. @13.56MHz

Test equipment: Agilent E4991A.

Electrical Performance: See Fig. 3-1.



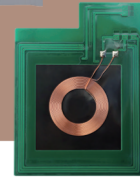
**CUSTOMIZED
PRODUCT
PRESENTATION**

We can customize Ferrite Sheet according to your requirements. Please refer to the following feature ranges:

Magnetic Permeability	
Relative Real Permeability	Customized, 180 Max.@13.56MHz
Relative Imaginary Permeability	Customized, 3-5@13.56MHz

Customized

Flexible NFC Antenna – MNFA-WFB Series



Operating temp. : -40°C ~+85°C

FEATURES

- ◆ Qi standard compliant for wireless charging coil
- ◆ Qi standard compliant
- ◆ Size, shape, characteristics customized
- ◆ Low loss, long read-write distance
- ◆ High permeability

APPLICATIONS

- ◆ Using for receiver module of electronics device such as mobile phones, tablet PC and wearable smart devices

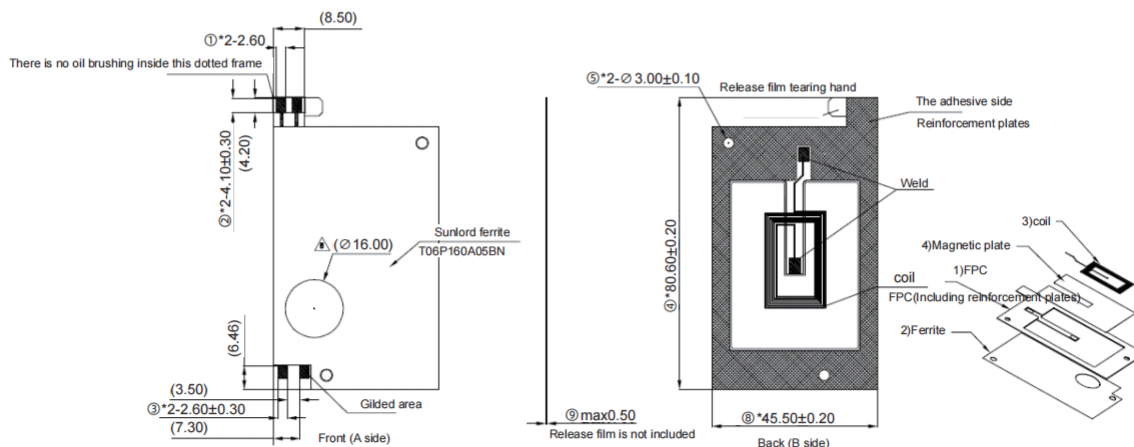
PRODUCT IDENTIFICATION

1	M	2	N	3	FA	4	SH0159	5	-W	6	F	7	B
1	Product Line		2	Product Category		3	Product Type						
	M	Magnetic		N	NFC		FA	Flexible					
4	Feature Code		5	W Wireless		6	NFC Antenna Material						
	SH0159, etc.			W: Wireless			F: FPC						
7	Packing												
	B	Box											

SPECIFICATIONS

NFC antenna structure

Unit: mm



@100KHz			
Inductance	Quality Factor	DC Resistance	AC Resistance
Ls	Q	Rdc	Rac
uH	-	mΩ	mΩ
8.0~8.2	20	190	237

The product was compliance with RoHS directive of EU.

NFC PRODUCT

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