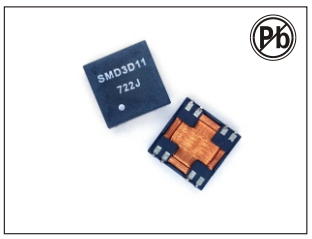
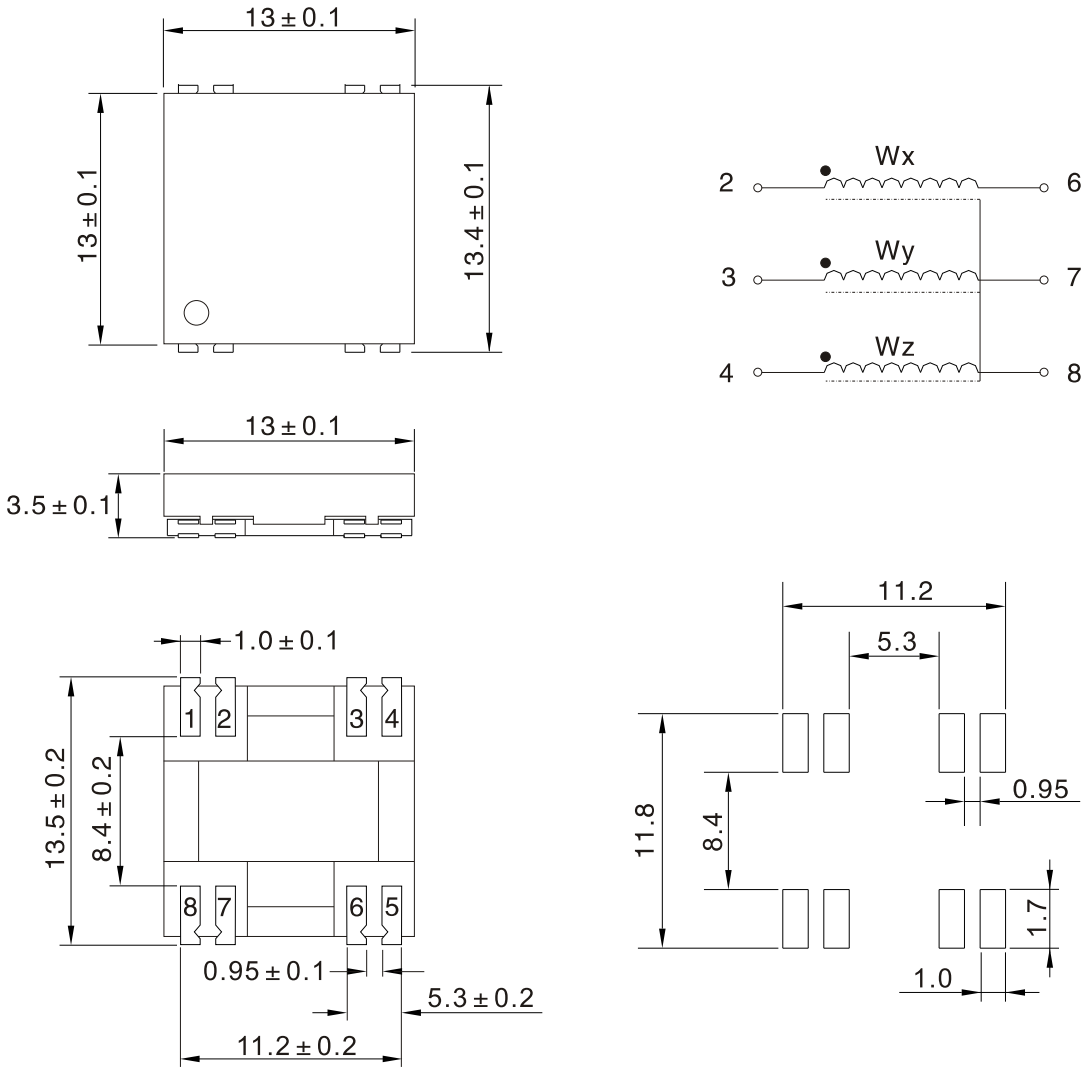


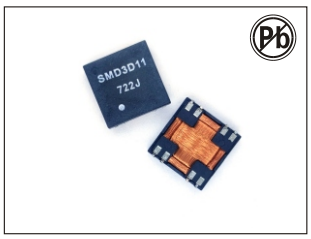
SMD 3D Coil(11.8X11.8X2.9mm)
SMD 3D11 SERIES

Small solution of 3D coil designed to achieve a verygood electrical performance in the smallest dimensions.
Applications:
– Automotive
– Passive keyless entry and Keyless Go Systems
– RTPMS with wake up functions
– Industrial logistics and control
– Access control
– Tracking devices
Keyless entry systems is a typical application for this coil, the isotropy is often sought in RF antenna. In transponder applications, this feature has been achieved by the combination of 3 single coils oriented in the 3 space axis with the aim of covering the maximum space orientation. This small size 3D coil offers the possibility of assembly in single component 3 coils with full functionality thus reducing cost saving PCB space and increasing the circuit reliability.

Dimensions



Note:All specifications subject to change without notice.



SMD 3D Coil(11.8X11.8X2.9mm)
SMD 3D11 SERIES

Electrical specifications

P/N SMD3D11–	Lx,y,z (mH)	Qx,y,z	SRFx,y (KHz,typ)	SRFz (KHz,Min)	RDCx,y (ΩMax)	RDCz (ΩMax)
242J	2.38	23	500	1000	75	95
252J	2.47	23	500	800	75	95
352J	3.45	26	450	800	85	120
402J	4.05	26	400	800	98	138
472J	4.77	26	380	800	117	170
492J	4.91	26	350	750	120	175
722J	7.20	30	330	700	150	210
103J	10.0	25	250	550	165	280

※ Test frquency 125KHz,1V
※ Sensitivity (S0) measured with Helmholtz Coils H=8.36 A/m@125kHz.
※ SRF: Self Resonant Frequency of the coil.
※ Wx/Wy/Wz means winding coil of X, Y and Z axis.
※ Test under the condition of relative humidity of 85%
※ Operating temperature –40℃ to +85℃
※ Any other inductance value at LF or tighter tolerances can be provided. Also can be supplied different inductance value in the different winding axis.

SMD M3D116 Series 3D antenna

SMD 3D116 Coil 3.4X11.6x11.6mm

Features

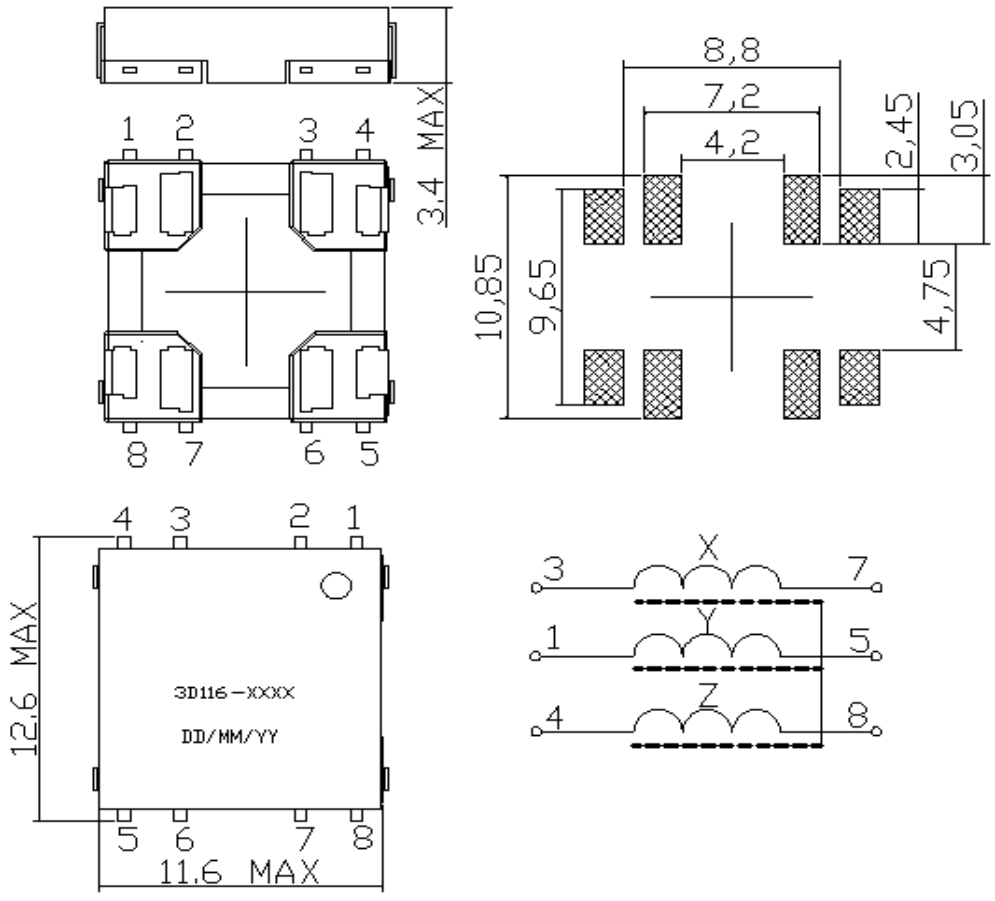
Small solution of 3D coil designed to achieve a very good electrical performance in the smallest dimensions. Applications:

- Automotive.
- Passive keyless entry.
- RTPMS with wake up functions.
- Industrial logistics and control.
- Access control.
- Tracking devices.

Keyless entry systems is a typical application for this coil, the isotropy is often sought in RF antenna. In transponder applications, this feature has been achieved by the combination of 3 single coils oriented in the 3 space axis with the aim of covering the maximum space orientation.

This small size 3D coil offers the possibility of assembly in single component 3 coils with full functionality, thus reducing cost, saving PCB space and increasing the circuit reliability.

Dimensions



SHINHOM

SMD M3D116 Series 3D antenna

SMD 3D116 Coil 3.4X11.6x11.6mm

RoHS COMPLIANT 2002/95/EC

Electrical speci!cations

Part Number	Inductance	Q	Inductance	Q	SRF (MHz)	SRF (KHz)	Remark
产品料号	X,Y,Z轴 (mH)	X,Y轴 (Typ.)	Z轴(mH)	Z轴(Typ.)	X,Y轴 (Typ.)	Z轴(Typ.)	备注
	电感值 (L)	品质因素	电感值 (L)	品质因素	共振频率	共振频率	
3D116-2320	2.38±5%	35	2.38±5%	25	2.1	700	
3D116-4720	4.77±5%	35	4.7±5%	25	1.6	600	
3D116-7220	7.2±5%	35	7.2±5%	20	1.2	500	

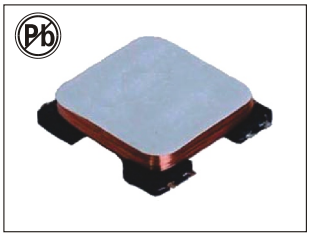
※Test Freq. : 125KHz / 1V.
※Operating Temp. : －40℃ ~ ＋85℃

※ Sensitivity (S0) measured with Helmholtz Coils H=8.36 A/m@125kHz.
※ SRF: Self Resonant Frequency of the coil.
※ Wx/Wy/Wz means winding coil of X, Y and Z axis.
※ f20/f125/f134.2 means resonant frequency of 20kHz, 125kHz and 134.2kHz.
※ Test under the condition of relative humidity of 85%
※ Any other inductance value at LF or tighter tolerances can be provided. Also can be supplied different inductance value in the different winding axis. Please contact our salesperson for any inquiries.

Soldering heat resistance:
260°C / 10 sec

Operating temperature range:
-40°C to + 125°C

Packaging unit (parts/reel):
1000



SMD 3D Coil 12.6X12.6X2.9mm
3D1229 SERIES

FEATURES:

Small solution of 3D coil designed to achieve a verygood electrical performance in the smallest dimensions.

OPTIONS:

Packaging unit (parts/reel):1000

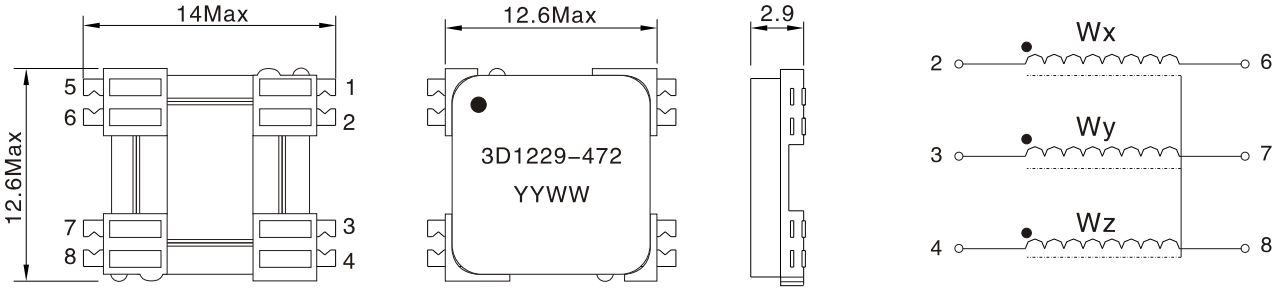
COMMON APPLICATIONS:

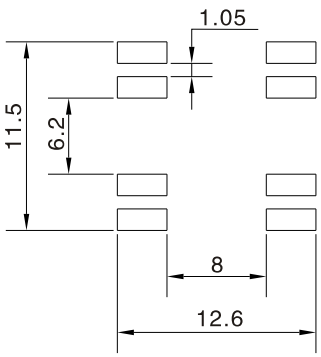
- Automotive
- Passive keyless entry and Keyless Go Systems
- RTPMS with wake up functions
- Industrial logistics and control
- Access control
- Tracking devices

Electrical specifications

Part No.	Lx,y,z mH (125KHz,1V)	Qx,y typ	SRFx,y (KHz,typ)	SRFz (KHz,typ)	RDCx,y (ΩMax)	RDCz (ΩMax)
3D1229-242	2.38	23	500	1000	75	95
3D1229-252	2.47	23	500	800	75	95
3D1229-352	3.45	26	450	800	85	120
3D1229-402	4.05	26	400	800	98	138
3D1229-472	4.77	26	380	800	117	170
3D1229-492	4.91	26	350	750	120	175
3D1229-722	7.20	30	350	750	150	210
3D1229-103	10.0	25	250	550	165	280

Dimensions





※ Sensitivity (S0) measured with Helmholtz Coils H=8.36 A/m@125kHz.

※ SRF: Self Resonant Frequency of the coil.

※ Wx/Wy/Wz means winding coil of X, Y and Z axis.

※ f20/f125/f134.2 means resonant frequency of 20kHz, 125kHz and 134.2kHz.

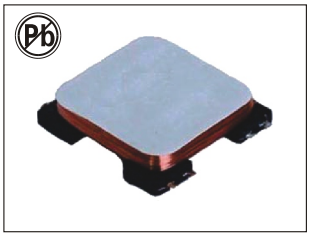
※ Test under the condition of relative humidity of 85%

※ Any other inductance value at LF or tighter tolerances can be provided. Also can be supplied differentinductance value in the different winding axis. Please contact our salesperson for any inquiries.

Soldering heat resistance:260℃ / 10sec

Operating temperature range:-40℃ to +125℃

Note:All specifications subject to change without notice.



SMD 3D Coil 12.6X12.6X3.25mm

3D1232 SERIES

FEATURES:

Small solution of 3D coil designed to achieve a verygood electrical performance in the smallest dimensions.

OPTIONS:

Packaging unit (parts/reel):1000

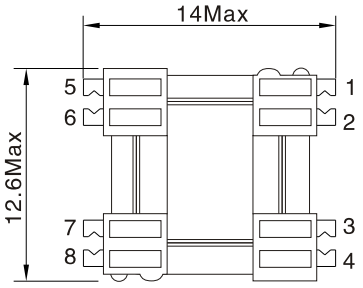
COMMON APPLICATIONS:

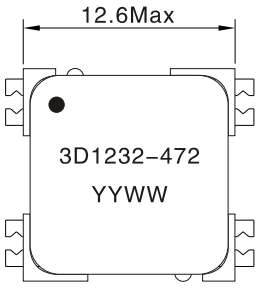
- Automotive
- Passive keyless entry and Keyless Go Systems
- RTPMS with wake up functions
- Industrial logistics and control
- Access control
- Tracking devices

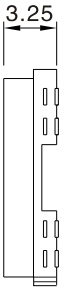
Electrical specifications

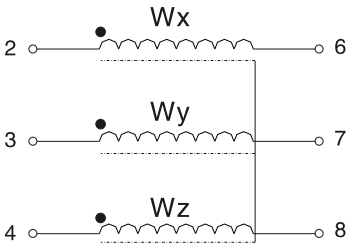
Part No.	Lx,y,z mH (125KHz,1V)	Qx,y typ	SRFx,y (KHz,typ)	SRFz (KHz,typ)	RDCx,y (ΩMax)	RDCz (ΩMax)
3D1232-242	2.38	23	500	1000	75	75
3D1232-252	2.47	23	500	800	75	75
3D1232-352	3.45	27	450	800	85	100
3D1232-402	4.05	27	400	800	98	98
3D1232-472	4.77	28	380	800	100	136
3D1232-492	4.91	27	350	750	105	140
3D1232-722	7.20	30	330	750	120	172
3D1232-103	10.0	25	250	550	165	258

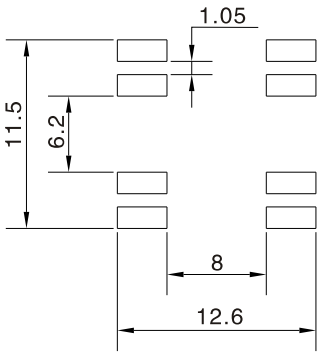
Dimensions











※ Sensitivity (S0) measured with Helmholtz Coils H=8.36 A/m@125kHz.

※ SRF: Self Resonant Frequency of the coil.

※ Wx/Wy/Wz means winding coil of X, Y and Z axis.

※ f20/f125/f134.2 means resonant frequency of 20kHz, 125kHz and 134.2kHz.

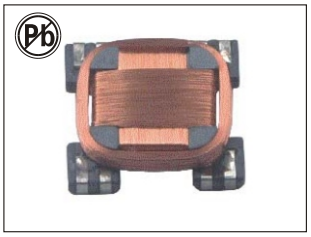
※ Test under the condition of relative humidity of 85%

※ Any other inductance value at LF or tighter tolerances can be provided. Also can be supplied differentinductance value in the different winding axis. Please contact our salesperson for any inquiries.

Soldering heat resistance:260℃ / 10sec

Operating temperature range:-40℃ to +125℃

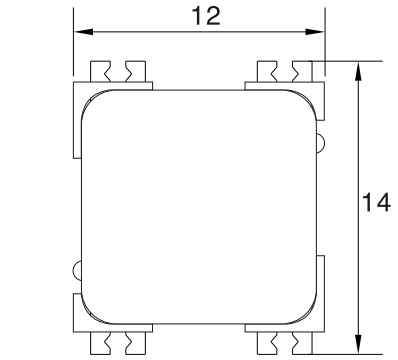
Note:All specifications subject to change without notice.

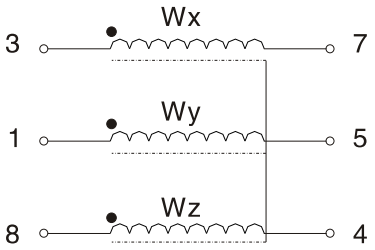


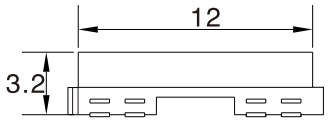
SMD 3D Coil 12X14X3.2mmMax(2.47mH–10mH)
3D12 SERIES

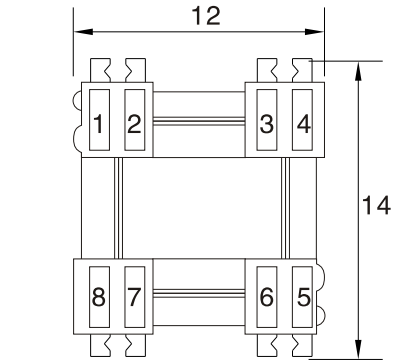
Small solution of 3D coil designed to achieve a verygood electrical performance in the smallest dimensions.
Applications:
– Automotive
– Passive keyless entry and Keyless Go Systems
– RTPMS with wake up functions
– Industrial logistics and control
– Access control
– Tracking devices
Keyless entry systems is a typical application for this coil, the isotropy is often sought in RF antenna. In transponder applications, this feature has been achieved by the combination of 3 single coils oriented in the 3 space axis with the aim of covering the maximum space orientation. This small size 3D coil offers the possibility of assembly in single component 3 coils with full functionality thus reducing cost saving PCB space and increasing the circuit reliability.

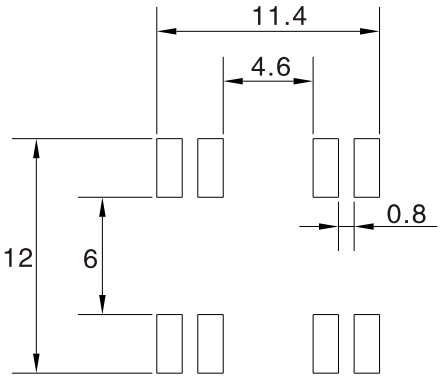
Dimensions



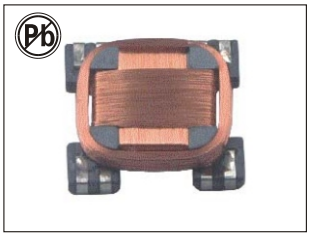








Note:All specifications subject to change without notice.



SMD 3D Coil 12X14X3.2mmMax(2.47mH–10mH)
3D12 SERIES

Electrical specifications

P/N	Lx,y,z	Cres(pF)	Qx,y typ	SRFx,y (KHz,Min)	SRFz (KHz,Min)	RDCx,y (Ω Max)	RDCz (Ω Max)	Sensitivity x,y,z (mVpp/App/m)
3D12–242	2.47	656	>23	>500	>1000	75	75	>55
3D12–252	2.58	628	>23	>500	>800	75	75	>57
3D12–342	3.45	470	>27	>450	>800	85	100	>67
3D12–402	4.05	400	>27	>400	>800	98	98	>72
3D12–472	4.77	340	>28	>380	>800	100	136	>85
3D12–492	4.91	330	>27	>350	>750	105	140	>85
3D12–722	7.20	225	>30	>330	>700	120	172	>95
3D12–103	10.0	162	>25	>250	>550	165	258	>105

This chart is a reference guide for the most common required values at working frequency of 125 kHz. Any other inductance value at LF or tighter tolerances can be provided. Also can be supplied different inductance values in the different winding axis. Please contact our sales department for any inquiry.
L and Q factor measured at 125 kHz, 1 Vac.
Sensitivity measured with Helmholtz coils H=1.27 App/m @125 kHz. Contact us for measurement specification.
SRF: Self Resonant Frequency of the coil.

SHINHOM

SMD M3D13-2.8 Series 3D antenna

SMD 3D13 Coil 2.8X13.2x13.2mm

RoHS COMPLIANT 2002/95/EC

Features

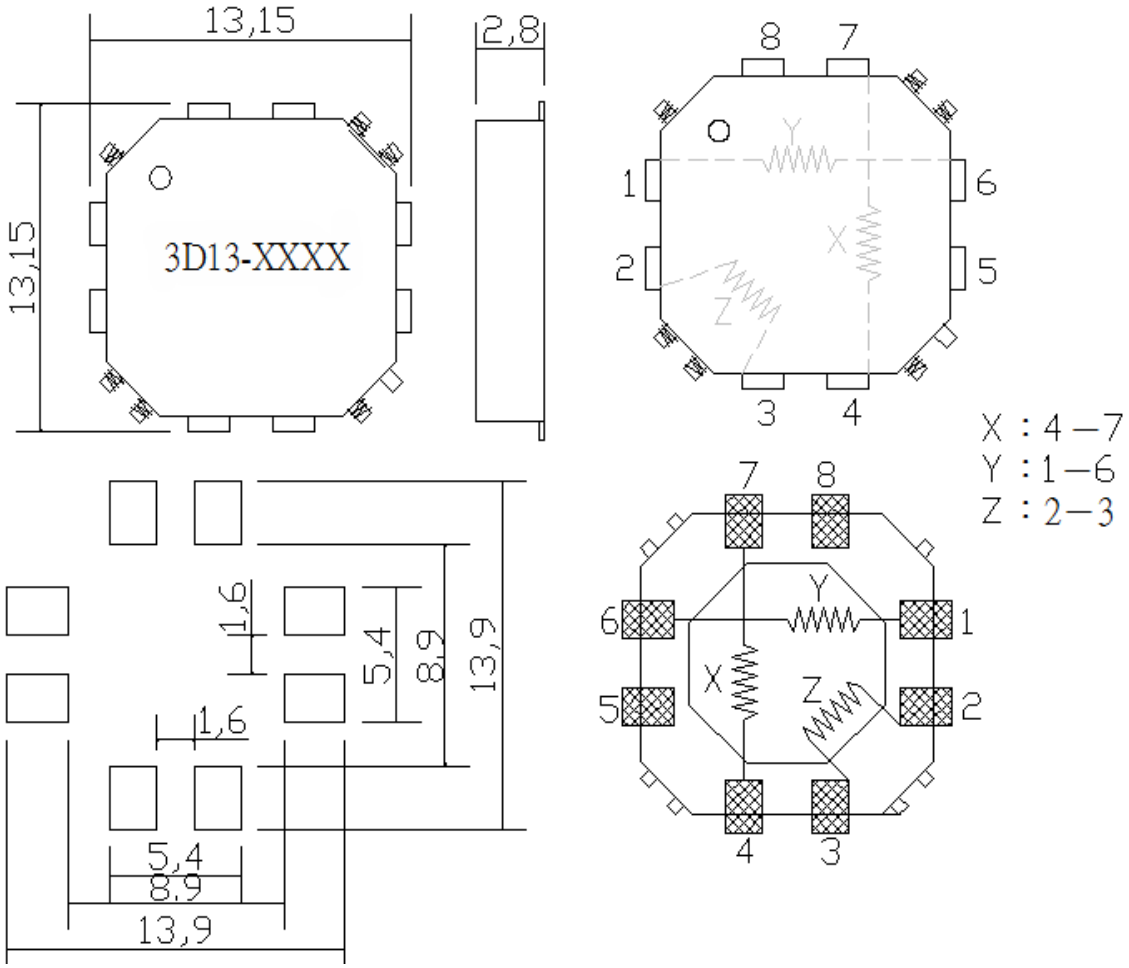
Small solution of 3D coil designed to achieve a very good electrical performance in the smallest dimensions. Applications:

- Automotive.
- Passive keyless entry.
- RTPMS with wake up functions.
- Industrial logistics and control.
- Access control.
- Tracking devices.

Keyless entry systems is a typical application for this coil, the isotropy is often sought in RF antenna. In transponder applications, this feature has been achieved by the combination of 3 single coils oriented in the 3 space axis with the aim of covering the maximum space orientation.

This small size 3D coil offers the possibility of assembly in single component 3 coils with full functionality, thus reducing cost, saving PCB space and increasing the circuit reliability.

Dimensions



SHINHOM

SMD M3D13-2.8 Series 3D antenna

SMD 3D13 Coil 2.8X13.2x13.2mm

RoHS COMPLIANT 2002/95/EC

Electrical specilcations

Part Number	Inductance	Q	Inductance	Q	SRF (MHz)	SRF (KHz)	Remark
产品料号	X,Y,Z轴 (mH)	X,Y轴 (Typ.)	Z轴(mH)	Z轴(Typ.)	X,Y轴 (Typ.)	Z轴(Typ.)	备注
	电感值 (L)	品质因素	电感值 (L)	品质因素	共振频率	共振频率	
3D13-2320	2.38±4%	35	3.4±4%	25	2.1	700	
3D13-4720	4.77±4%	35	7.2±4%	25	1.6	600	
3D13-6820	6.8±4%	35	7.2±4%	25	1.3	500	
3D13-7220	7.2±4%	35	7.2±4%	25	1.2	500	

※Test Freq.：125KHz / 1V.

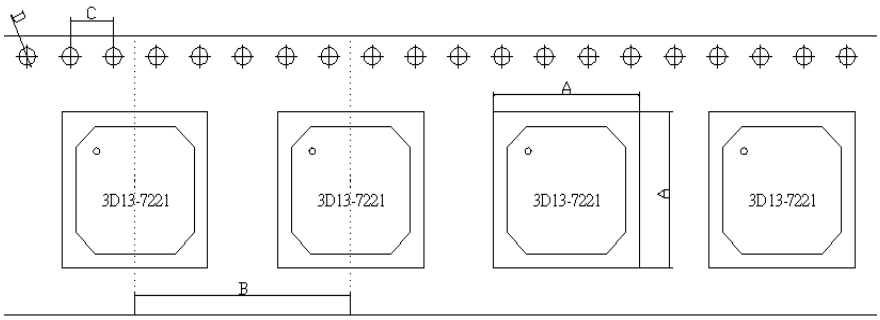
※Operating Temp.：－40℃～＋85℃

※ Sensitivity (S0) measured with Helmholtz Coils H=8.36 A/m@125kHz.
※ SRF: Self Resonant Frequency of the coil.
※ Wx/Wy/Wz means winding coil of X, Y and Z axis.
※ f20/f125/f134.2 means resonant frequency of 20kHz, 125kHz and 134.2kHz.
※ Test under the condition of relative humidity of 85%
※ Any other inductance value at LF or tighter tolerances can be provided. Also can be supplied different inductance value in the different winding axis. Please contact our salesperson for any inquiries.

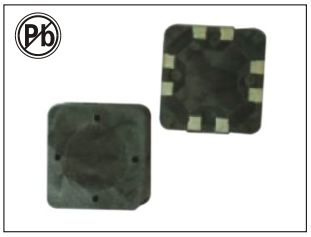
Soldering heat resistance:
260°C / 10 sec

Operating temperature range:
-40°C to + 125°C

Packaging unit (parts/reel):
900PCS/R



A=13.5,B=40,C=4,D=1.5



SMD 3D Antenna 13.0X13.0X3.1mm
M3D13 SERIES

Features

Keyless entry systems is a typical application for this coil, the isotropy is often sought in RF antenna. In transponder applications, this feature has been achieved by the combination of 3 single coils oriented in the 3 space axis with the aim of covering the maximum space orientation.

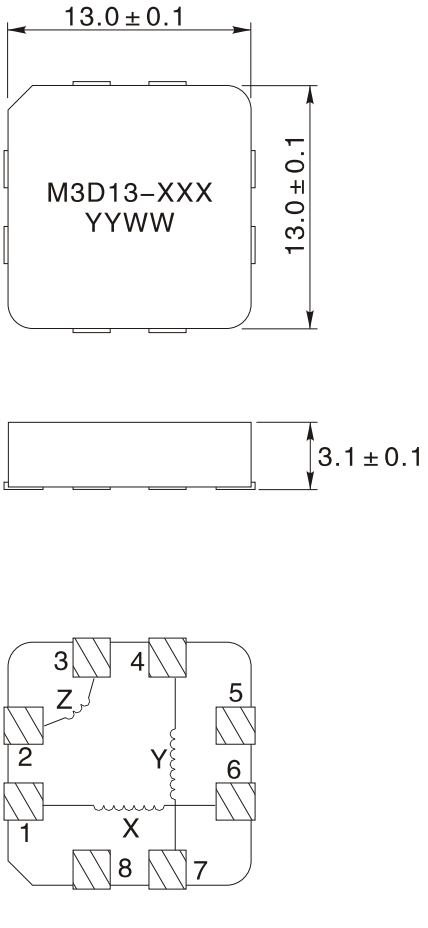
This small size 3D coil offers the possibility of assembly in single component 3 coils with full functionality, thus reducing cost, saving PCB space and increasing the circuit reliability.

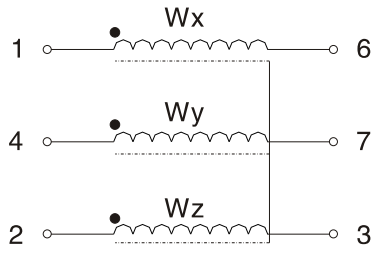
Small solution of 3D coil designed toachieve a very good electrical performance in the smallest dimensions.

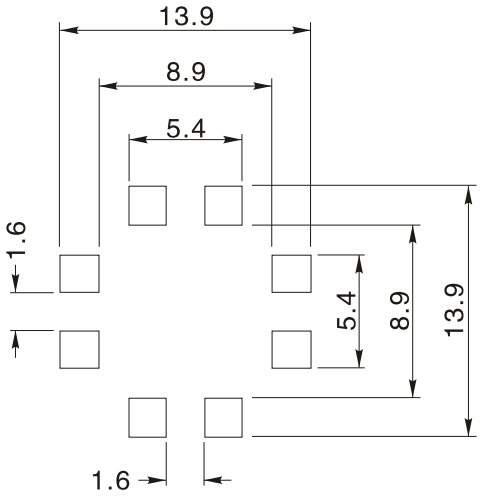
Applications:

– Automotive.
– Passive keyless entry.
– RTPMS with wake up functions.
– Industrial logistics and control.
– Access control.
– Tracking devices.

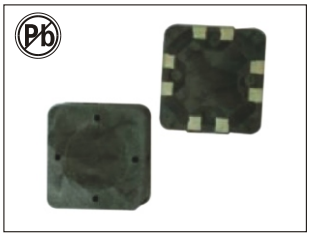
Dimensions







Note:All specifications subject to change without notice.



SMD 3D Antenna 13.0X13.0X3.1mm
M3D13 SERIES

Electrical specifications

P/N	Lx,y (mH)	Lz (mH)	Qx,y (typ.)	Qz (typ.)	SRFx,y (MHz,typ.)	SRFz (KHz,typ.)
M3D13–232	2.38±4%	3.4±4%	35	30	2	700
M3D13–472	4.77±4%	7.2±4%	35	30	1.5	500
M3D13–7221	7.2±4%	7.2±4%	35	30	1	500
M3D13–7222	7.2±4%	10.8±4%	35	30	1	400
M3D13–103	10.0±4%	10.0±4%	35	30	0.8	400

- **Test Freq. : 125KHz / 1V.**
- **Operating Temp. : –40℃ ~ +85℃**

- Sensitivity (S0) measured with Helmholtz Coils H=8.36 A/m@125kHz.
- SRF: Self Resonant Frequency of the coil.
- Wx/Wy/Wz means winding coil of X, Y and Z axis.
- f20/f125/f134.2 means resonant frequency of 20kHz, 125kHz and 134.2kHz.
- Test under the condition of relative humidity of 85%
- Any other inductance value at LF or tighter tolerances can be provided. Also can be supplied different inductance value in the different winding axis. Please contact our salesperson for any inquiries.

Glass transponder

GRFID SERIES

FEATURES:

- High security for animal ID
- industry & logistics applications
- Flexible solution
- Available in several sizes and frequencies
- Write–protected memory
- Unique ID
- Password protected operation

APPLICATIONS:

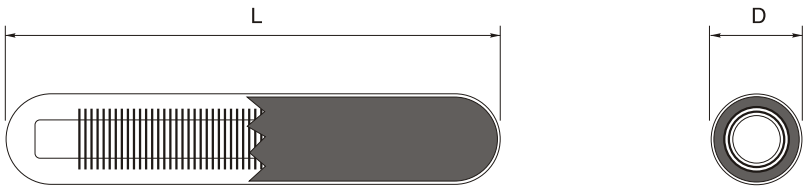
- Animal identification
- Pigeon race
- Waste management
- Access control
- Logistics/process control

ELECTRICAL CHARACTERISTICS:

Operating Frequency	125KHz
Material	Biocompatible glass
Chip	Lexis ISO11784/85 FDX–B
Password	32–bit
Unique ID	32–bit factory programmed

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



Standard sizes available:

Prat No.	0208	0210	0212	0313	0323	0332	0434
D	2.12	2.12	2.12	3.15	3.85	3.85	4.0
L	8.0	10.0	12.0	13.3	23.0	32.0	34.0

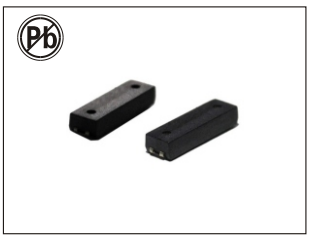
Notes:

other chips version are available upon request

other sizes are available upon request

Low–frequency receiving antenna

RFID0803C SERIES



FEATURES:

- Robust construction for a high mechanical stability
- Qualified to AEC–Q200
- Suitable for pick and placeand AOI (Automatic Optical Inspection)
- Suitable for lead–free reflow soldering
- RoHS–compatible

APPLICATIONS:

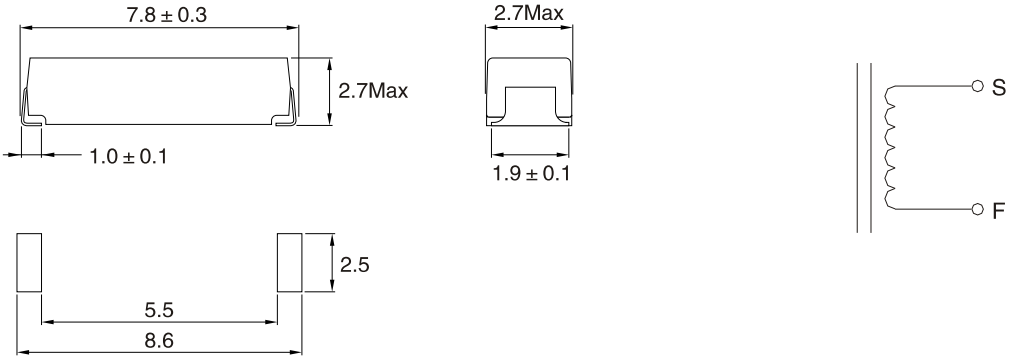
- Car access system
  Immobilizer
  PEPS (Passive Entry, Passive Start)
- TPMS (Tire Pressure Monitoring Systems)

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (mH)	Test frequency (KHz)	SRF (MHz) Min	Q
RFID0803C–102	1.0 ± 3%	125	3.0	35
RFID0803C–232	2.36 ± 3%	125	2.0	35
RFID0803C–722	7.2 ± 3%	125	1.0	35
RFID0803C–183	18.52 ± 3%	125	0.4	30

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



NOTE:

- Test Frequency : 125KHz @25℃.
- Testing Instrument : HP4284A
- Ambient Temperature: –40℃ – +85℃.
- Storage Temperature: –40℃ – +105℃.

Low–frequency receiving antenna

RFID1103 SERIES

FEATURES:

- Robust construction for a high mechanical stability
- Qualified to AEC–Q200
- Suitable for pick and placeand AOI (Automatic Optical Inspection)
- Suitable for lead–free reflow soldering
- RoHS–compatible

APPLICATIONS:

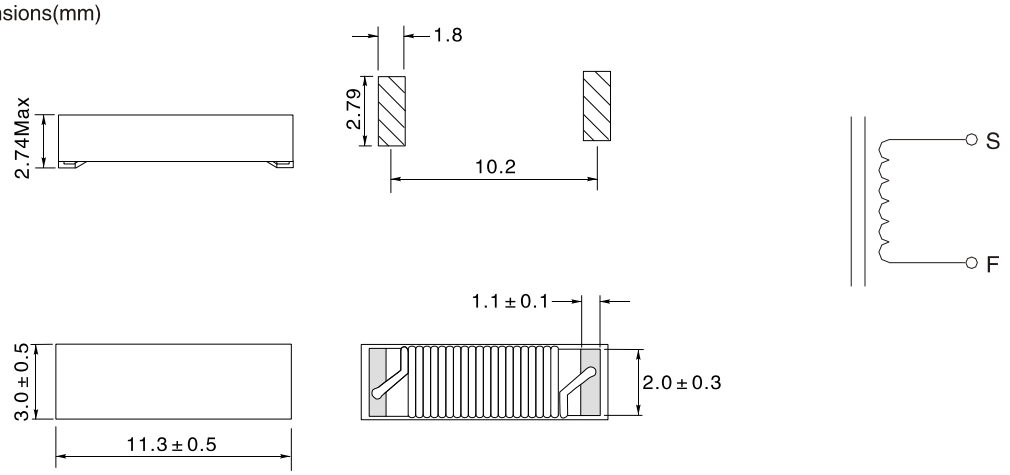
- Car access system
  Immobilizer
  PEPS (Passive Entry, Passive Start)
- TPMS (Tire Pressure Monitoring Systems)

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (mH)	Test frequency (KHz)	Impedance (Ω)	Q
RFID1103–192	1.97 ± 5%	125	34	15
RFID1103–232	2.38 ± 5%	125	39	15
RFID1103–332	3.3 ± 5%	125	51	15
RFID1103–412	4.15 ± 5%	125	74	17
RFID1103–502	4.99 ± 5%	125	96	17
RFID1103–682	6.8 ± 5%	125	112	17
RFID1103–712	7.1 ± 5%	125	115	17
RFID1103–812	8.1 ± 5%	125	123	17
RFID1103–902	9.0 ± 5%	125	135	17
RFID1103–103	10.0 ± 5%	125	145	17

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)

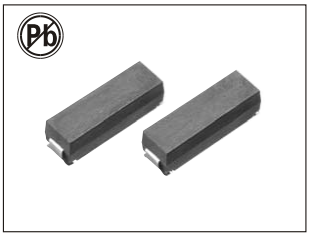


NOTE:

- Test Frequency : 125KHz @25℃.
- Testing Instrument : HP4284A
- Ambient Temperature: –40℃ – +85℃.
- Storage Temperature: –40℃ – +105℃.

Low–frequency receiving antenna

RFID1103C SERIES



FEATURES:

- Robust construction for a high mechanical stability
- Qualified to AEC–Q200
- Suitable for pick and placeand AOI (Automatic Optical Inspection)
- Suitable for lead–free reflow soldering
- RoHS–compatible

APPLICATIONS:

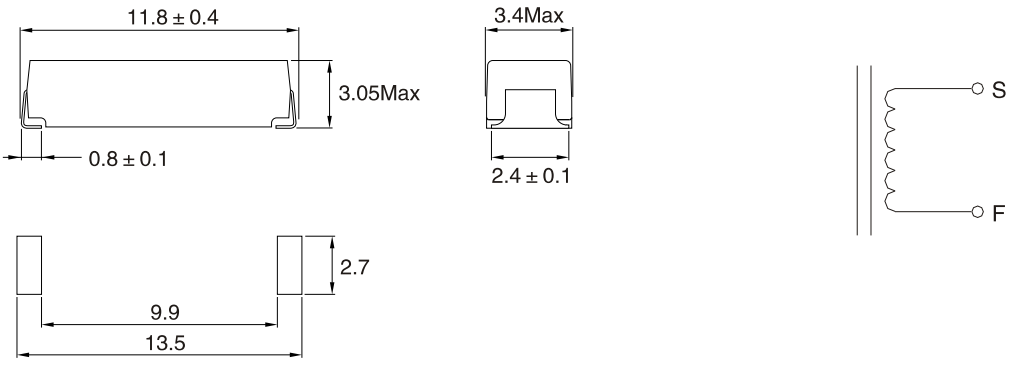
- Car access system
  Immobilizer
  PEPS (Passive Entry, Passive Start)
- TPMS (Tire Pressure Monitoring Systems)

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (mH)	Test frequency (KHz)	Impedance (Ω)	Q
RFID1103C–192	1.97 ± 5%	125	34	15
RFID1103C–232	2.38 ± 5%	125	39	15
RFID1103C–332	3.3 ± 5%	125	51	15
RFID1103C–412	4.15 ± 5%	125	74	17
RFID1103C–502	4.99 ± 5%	125	96	17
RFID1103C–682	6.8 ± 5%	125	112	17
RFID1103C–712	7.1 ± 5%	125	115	17
RFID1103C–812	8.1 ± 5%	125	123	17
RFID1103C–902	9.0 ± 5%	125	135	17
RFID1103C–103	10.0 ± 5%	125	145	17

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)

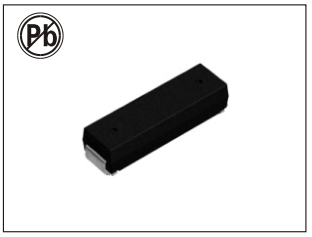


NOTE:

- Test Frequency : 125KHz @25℃.
- Testing Instrument : HP4284A
- Ambient Temperature: –40℃ – +85℃.
- Storage Temperature: –40℃ – +105℃.

SMD TRANSPONDER COIL

RFID113528 SERIES



FEATURES:

- Robust construction for a high mechanical stability
- Qualified to AEC–Q200
- Suitable for pick and placeand AOI (Automatic Optical Inspection)
- Suitable for lead–free reflow soldering
- RoHS–compatible

APPLICATIONS:

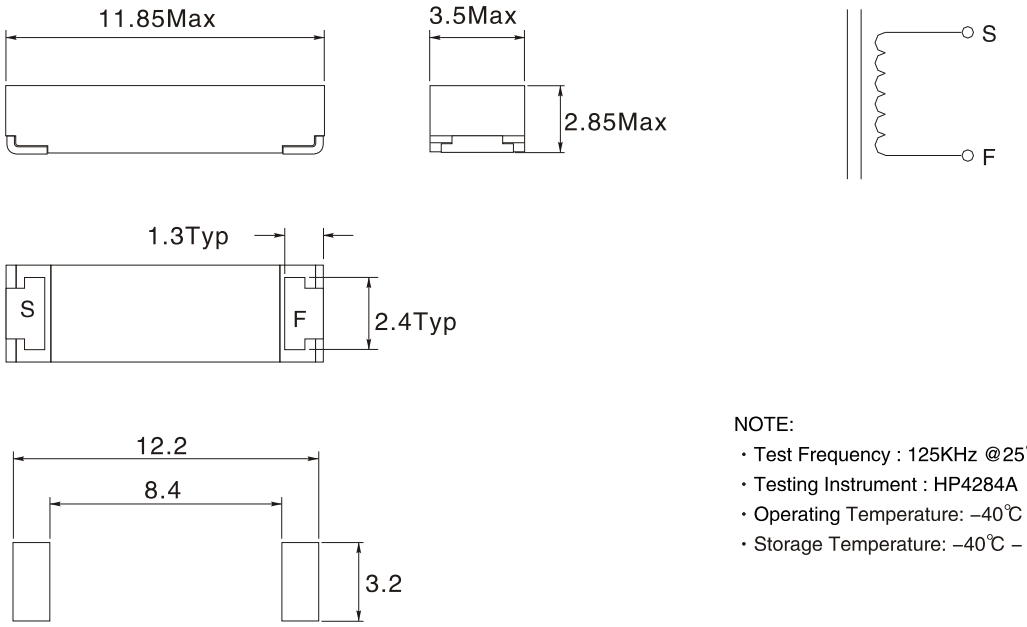
- Car access system
  Immobilizer
  PEPS (Passive Entry, Passive Start)
- TPMS (Tire Pressure Monitoring Systems)

ELECTRICAL CHARACTERISTICS@25℃:

Part Number	Inductance (mH)	Resistance DCR	SRF (Min)	Q	Styp
RFID113528–102	1.0±5%	20Ω Max	3.5MHz	30Min	15mV/uT
RFID113528–232	2.36±5%	30Ω Max	2.0MHz	30Min	30mV/uT
RFID113528–492	4.9±5%	60 ΩMax	1.2MHz	30Min	40mV/uT
RFID113528–722	7.2±5%	90Ω Max	1.0MHz	30Min	50mV/uT

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



NOTE:

- Test Frequency : 125KHz @25℃.
- Testing Instrument : HP4284A
- Operating Temperature: –40℃ – +125℃.
- Storage Temperature: –40℃ – +105℃.

Packaging:

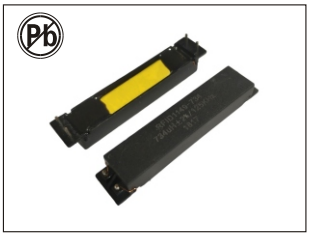
1: Blister tape:

2: 2500pcs/reel.

3: Cold seal or heat seal

Low–frequency receiving antenna

RFID1149 SERIES



FEATURES:

- Robust construction for a high mechanical stability
- Qualified to AEC–Q200
- Suitable for pick and placeand AOI (Automatic Optical Inspection)
- Suitable for lead–free reflow soldering
- RoHS–compatible

APPLICATIONS:

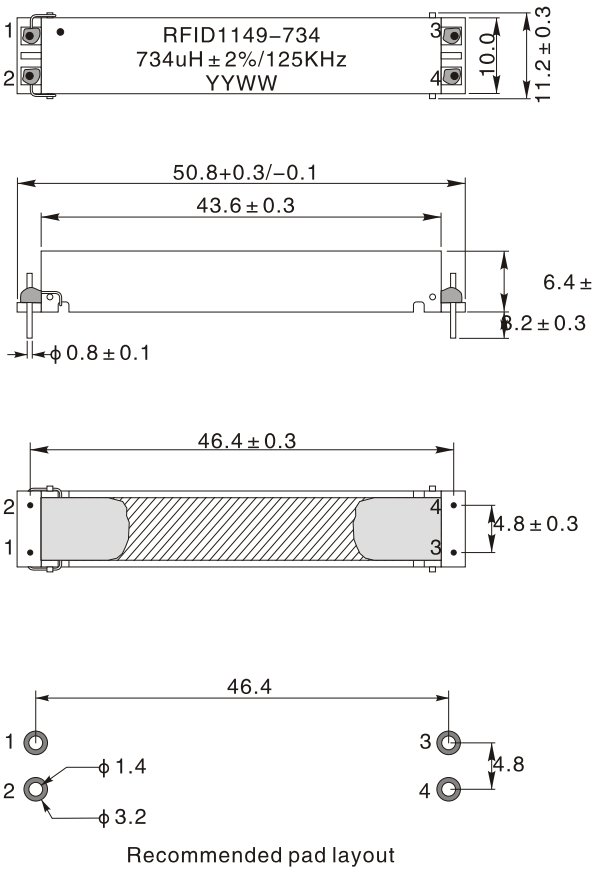
- Car access system
  Immobilizer
  PEPS (Passive Entry, Passive Start)
- TPMS (Tire Pressure Monitoring Systems)

ELECTRICAL CHARACTERISTICS:

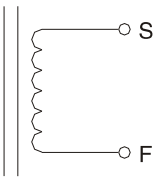
Part Number	Inductance (uH)	Test frequency (KHz)	Resistance (Ω)	Q
RFID1149–734	734 ± 5%	125	2.8 ± 10%	120

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



Recommended pad layout

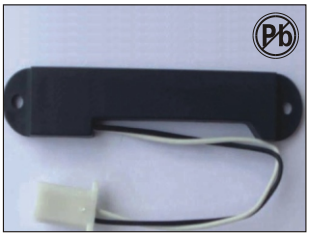


NOTE:

- Test Frequency : 125KHz @25℃.
- Testing Instrument : HP4284A
- Ambient Temperature: –40℃ – +85℃.
- Storage Temperature: –40℃ – +105℃.

RFID Low-profile Base-potted Emitter Antenna

RFID13020A SERIES



COMMON APPLCATIONS:

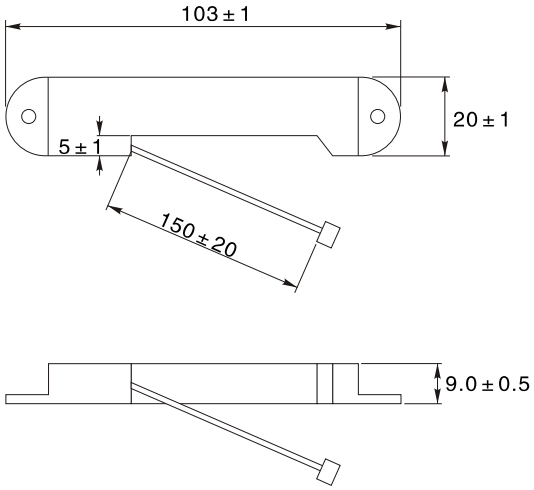
Fit in the car (pasted on the windshield surface, inside the instrument panel, in the trunk of the car, etc.) but should avoid to install on the metal body surface or in a small space surrounded by metal.The sensing distance varies depending on how well the car's internal shielding is

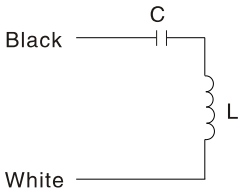
ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (μH)	Test frequency (KHz)	Capacitance (nF)	Q
RFID10320A-1	500±2%	125	3.3	125
RFID10320A-2	345±2%	125	4.7	125
RFID10320A-3	161±2%	125	10.0	125
RFID10320A-4	426±2%	134.2	3.3	125
RFID10320A-5	300±2%	134.2	4.7	125

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)





Note:

Resonant frequency: 125KHz±1.5%@25℃
125KHz±3%@-40℃ to +85℃
134.2KHz±1.5%@25℃
134.2KHz±3%@-40℃ to +85℃

Induced current: 2.8A Max,Duty 30%

Operating temperature: -40℃ to +85℃

Storage temperature: -40℃ to +105℃

In addition to the above mass production parameters, can be customized according to customer requirements, including different induction frequency, wire length, terminal type, etc

RFID Low-profile Base-potted Emitter Antenna

RFID7016A SERIES

COMMON APPLCATIONS:

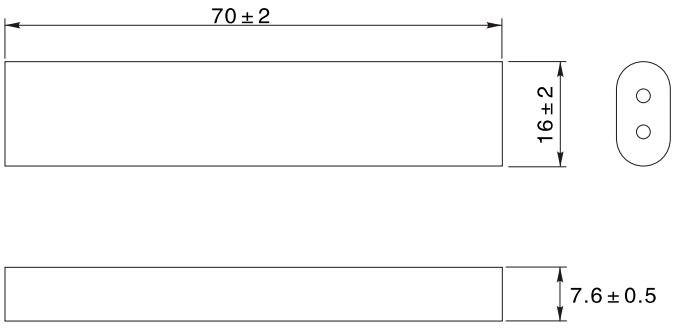
Fit in the car (pasted on the windshield surface, inside the instrument panel, in the trunk of the car, etc.) but should avoid to install on the metal body surface or in a small space surrounded by metal.The sensing distance varies depending on how well the car's internal shielding is

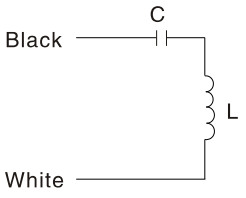
ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (μH)	Test frequency (KHz)	Capacitance (nF)	Q
RFID7016A-1	500±2%	125	3.3	125
RFID7016A-2	345±2%	125	4.7	125
RFID7016A-3	161±2%	125	10.0	125
RFID7016A-4	426±2%	134.2	3.3	125
RFID7016A-5	300±2%	134.2	4.7	125

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)





Wire: 2000mm±100mm

Note:

Resonant frequency: 125KHz±1.5%@25℃
125KHz±3%@-40℃ to +85℃
134.2KHz±1.5%@25℃
134.2KHz±3%@-40℃ to +85℃

Induced current: 2.8A Max,Duty 30%

Operating temperature: -40℃ to +85℃

Storage temperature: -40℃ to +105℃

In addition to the above mass production parameters, can be customized according to customer requirements, including different induction frequency, wire length, terminal type, etc

RFID Low-profile Base-potted Emitter Antenna

RFID8213A SERIES

COMMON APPLCATIONS:

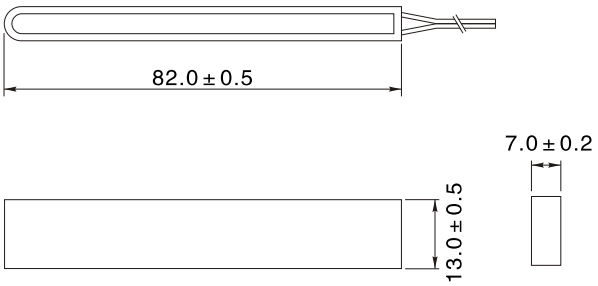
Fit in the car (pasted on the windshield surface, inside the instrument panel, in the trunk of the car, etc.) but should avoid to install on the metal body surface or in a small space surrounded by metal.The sensing distance varies depending on how well the car's internal shielding is

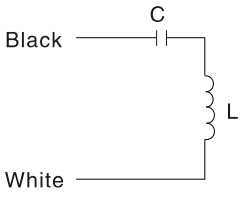
ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (μH)	Test frequency (KHz)	Capacitance (nF)	Q
RFID8213A-1	500±2%	125	3.3	125
RFID8213A-2	345±2%	125	4.7	125
RFID8213A-3	161±2%	125	10.0	125
RFID8213A-4	426±2%	134.2	3.3	125
RFID8213A-5	300±2%	134.2	4.7	125

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)





Wire: 2000mm±100mm

Note:

Resonant frequency: 125KHz±1.5%@25℃
125KHz±3%@-40℃ to +85℃
134.2KHz±1.5%@25℃
134.2KHz±3%@-40℃ to +85℃

Induced current: 2.8A Max,Duty 30%

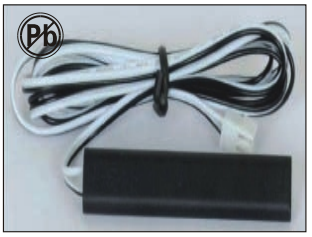
Operating temperature: -40℃ to +85℃

Storage temperature: -40℃ to +105℃

In addition to the above mass production parameters, can be customized according to customer requirements, including different induction frequency, wire length, terminal type, etc

RFID Low-profile Base-potted Emitter Antenna

RFID8516A SERIES



COMMON APPLCATIONS:

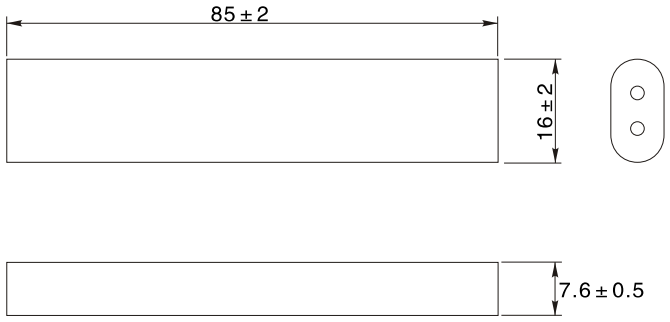
Fit in the car (pasted on the windshield surface, inside the instrument panel, in the trunk of the car, etc.) but should avoid to install on the metal body surface or in a small space surrounded by metal.The sensing distance varies depending on how well the car's internal shielding is

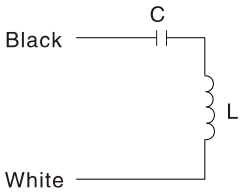
ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (μH)	Test frequency (KHz)	Capacitance (nF)	Q
RFID8516A-1	500±2%	125	3.3	125
RFID8516A-2	345±2%	125	4.7	125
RFID8516A-3	161±2%	125	10.0	125
RFID8516A-4	426±2%	134.2	3.3	125
RFID8516A-5	300±2%	134.2	4.7	125

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)





Wire: 2000mm±100mm

Note:

Resonant frequency: 125KHz±1.5%@25℃
125KHz±3%@-40℃ to +85℃
134.2KHz±1.5%@25℃
134.2KHz±3%@-40℃ to +85℃

Induced current: 2.8A Max,Duty 30%

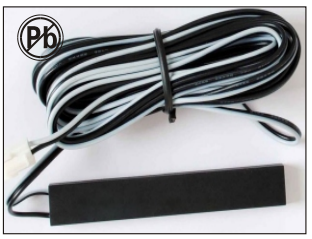
Operating temperature: -40℃ to +85℃

Storage temperature: -40℃ to +105℃

In addition to the above mass production parameters, can be customized according to customer requirements, including different induction frequency, wire length, terminal type, etc

RFID Low-profile Base-potted Emitter Antenna

RFID9514A SERIES



COMMON APPLCATIONS:

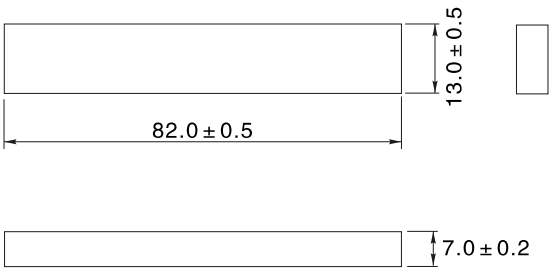
Fit in the car (pasted on the windshield surface, inside the instrument panel, in the trunk of the car, etc.) but should avoid to install on the metal body surface or in a small space surrounded by metal.The sensing distance varies depending on how well the car's internal shielding is

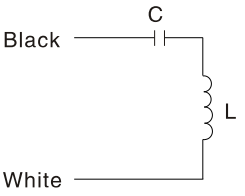
ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (μH)	Test frequency (KHz)	Capacitance (nF)	Q
RFID9514A-1	500±2%	125	3.3	125
RFID9514A-2	345±2%	125	4.7	125
RFID9514A-3	161±2%	125	10.0	125
RFID9514A-4	426±2%	134.2	3.3	125
RFID9514A-5	300±2%	134.2	4.7	125

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)





Wire: 2000mm±100mm

Note:

Resonant frequency: 125KHz±1.5%@25℃
125KHz±3%@-40℃ to +85℃
134.2KHz±1.5%@25℃
134.2KHz±3%@-40℃ to +85℃

Induced current: 2.8A Max,Duty 30%

Operating temperature: -40℃ to +85℃

Storage temperature: -40℃ to +105℃

In addition to the above mass production parameters, can be customized according to customer requirements, including different induction frequency, wire length, terminal type, etc

Low–frequency receiving antenna

SDTR0602 SERIES

FEATURES:

- Robust construction for a high mechanical stability
- Suitable for lead–free reflow soldering
- High sensitivity for 20KHz,40KHz and 125KHz application
- RoHS–compatible

APPLICATIONS:

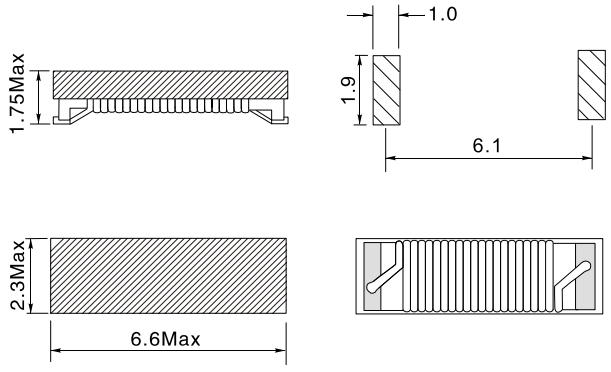
- Car access system
  Immobilizer
  PEPS (Passive Entry, Passive Start)
- TPMS (Tire Pressure Monitoring Systems)

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (mH)	Working and Test frequency	SRF (KHz)Min	Q
SDTR0602A–232	2.38±5%	125KHz	1000	35
SDTR0602A–282	2.89±5%		1000	30
SDTR0602A–342	3.44±5%		700	25
SDTR0602A–412	4.15±5%		600	20
SDTR0602A–492	4.91±5%		600	25
SDTR0602A–602	6.0±5%		450	23
SDTR0602A–722	7.2±5%		450	20
SDTR0602A–732	7.36±5%		400	23
SDTR0602A–902	9.0±5%		300	20
SDTR0602A–103	10.8±5%		300	20
SDTR0602B–203	20±5%	40KHz	250	15
SDTR0602B–333	33±5%		200	12
SDTR0602B–473	47±5%		200	9
SDTR0602B–563	56±5%		190	9
SDTR0602B–673	67±5%		160	8
SDTR0602B–823	82±5%		140	7
SDTR0602B–124	120±5%		120	7
SDTR0602B–184	184±5%		80	8
SDTR0602C–333	33±5%	20KHz	200	10
SDTR0602C–473	47±5%		200	8
SDTR0602C–563	56±5%		190	7.5
SDTR0602C–673	67±5%		160	6.5
SDTR0602C–823	82±5%		140	5.6
SDTR0602C–104	100±5%		120	5.0
SDTR0602C–124	120±5%		100	4.5

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

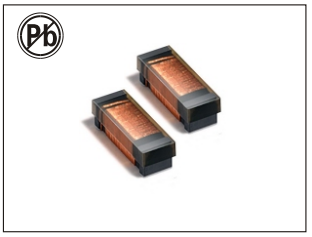
Dimensions(mm)



NOTE:
- Testing Instrument : HP4284A
- Ambient Temperature: –40℃ – +85℃.
- Storage Temperature: –40℃ – +105℃.

Low–frequency receiving antenna

SDTR0602D SERIES



FEATURES:

- Robust construction for a high mechanical stability
- Qualified to AEC–Q200
- Suitable for pick and placeand AOI (Automatic Optical Inspection)
- Suitable for lead–free reflow soldering
- RoHS–compatible

APPLICATIONS:

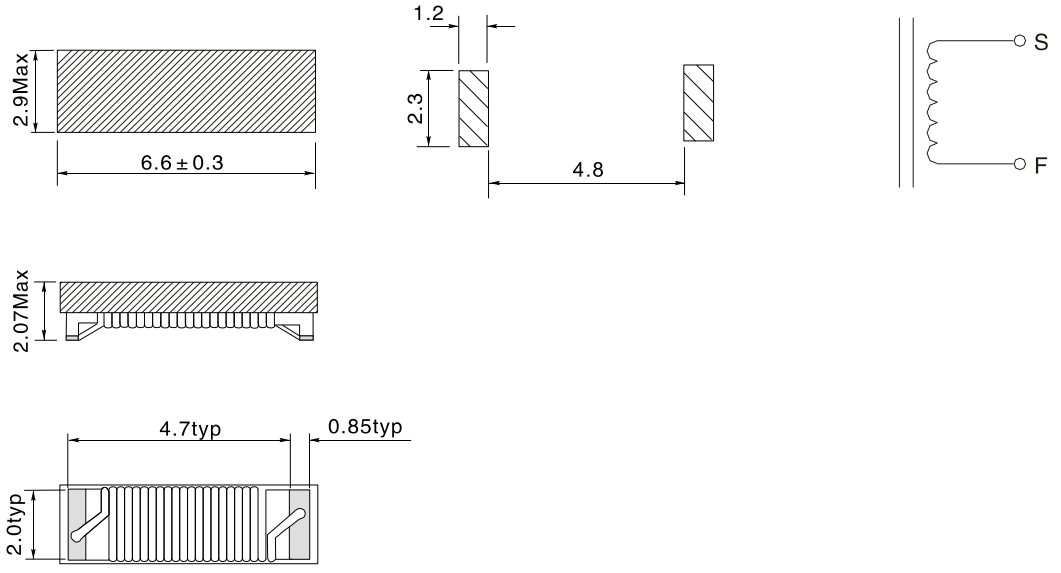
- Car access system
  Immobilizer
  PEPS (Passive Entry, Passive Start)
- TPMS (Tire Pressure Monitoring Systems)

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (mH)	Test frequency (KHz)	SRF (KHz)typ.	Q typ.
SDTR0602D–232	2.38±5%	125	1000	35
SDTR0602D–372	3.7±5%	125	700	25
SDTR0602D–472	4.7±5%	125	600	25
SDTR0602D–492	4.91±5%	125	600	25
SDTR0602D–722	7.2±5%	125	450	20
SDTR0602D–902	9.0±5%	125	300	20

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)

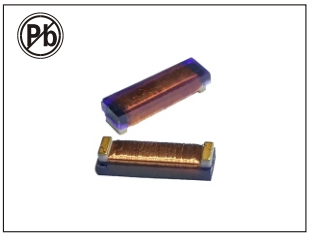


NOTE:

- Test Frequency : 125KHz,0.25V @25℃.
- Testing Instrument : HP4284A
- Operating Temperature: –30℃ to +100℃.
- Insulating resistance: 100MΩ Min,100VDC between coil to core
- Hi–Pot: 500Vac,3mA,3S between coil to core

Low–frequency receiving antenna

SDTR1103 SERIES



FEATURES:

- Robust construction for a high mechanical stability
- Qualified to AEC–Q200
- Suitable for pick and placeand AOI (Automatic Optical Inspection)
- Suitable for lead–free reflow soldering
- RoHS–compatible

APPLICATIONS:

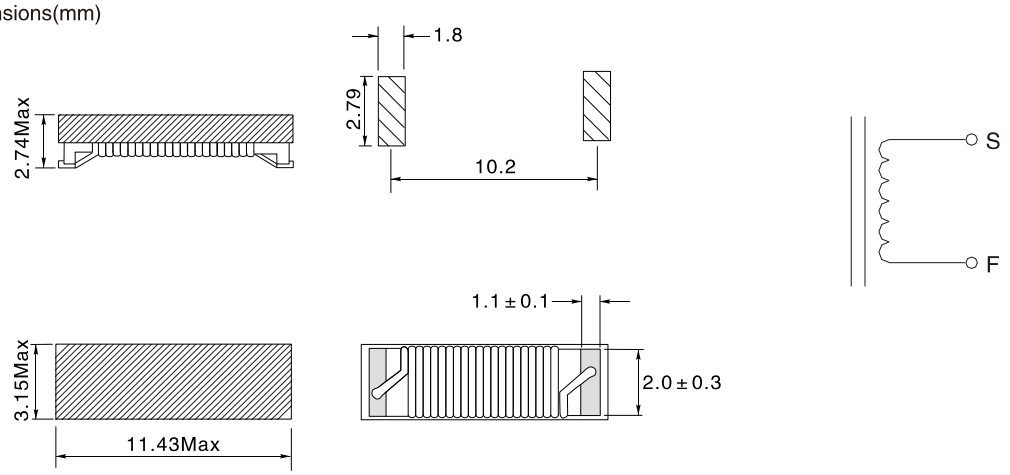
- Car access system
  Immobilizer
  PEPS (Passive Entry, Passive Start)
- TPMS (Tire Pressure Monitoring Systems)

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (mH)	Test frequency (KHz)	Impedance (Ω)	Q
SDTR1103–192	1.97 ± 5%	125	34	15
SDTR1103–232	2.38 ± 5%	125	39	15
SDTR1103–332	3.3 ± 5%	125	51	15
SDTR1103–412	4.15 ± 5%	125	74	17
SDTR1103–502	4.99 ± 5%	125	96	17
SDTR1103–682	6.8 ± 5%	125	112	17
SDTR1103–712	7.1 ± 5%	125	115	17
SDTR1103–812	8.1 ± 5%	125	123	17
SDTR1103–902	9.0 ± 5%	125	135	17
SDTR1103–103	10.0 ± 5%	125	145	17

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



NOTE:

- Test Frequency : 125KHz @25℃.
- Testing Instrument : HP4284A
- Ambient Temperature: –40℃ – +85℃.
- Storage Temperature: –40℃ – +105℃.

Low-frequency receiving antenna

SDTR7026 SERIES

FEATURES:

- Ruggedized design to pass drop testing
- AEC-Q200 qualified
- Suitable for lead-free reflow soldering
- RoHS-compatible

APPLICATIONS:

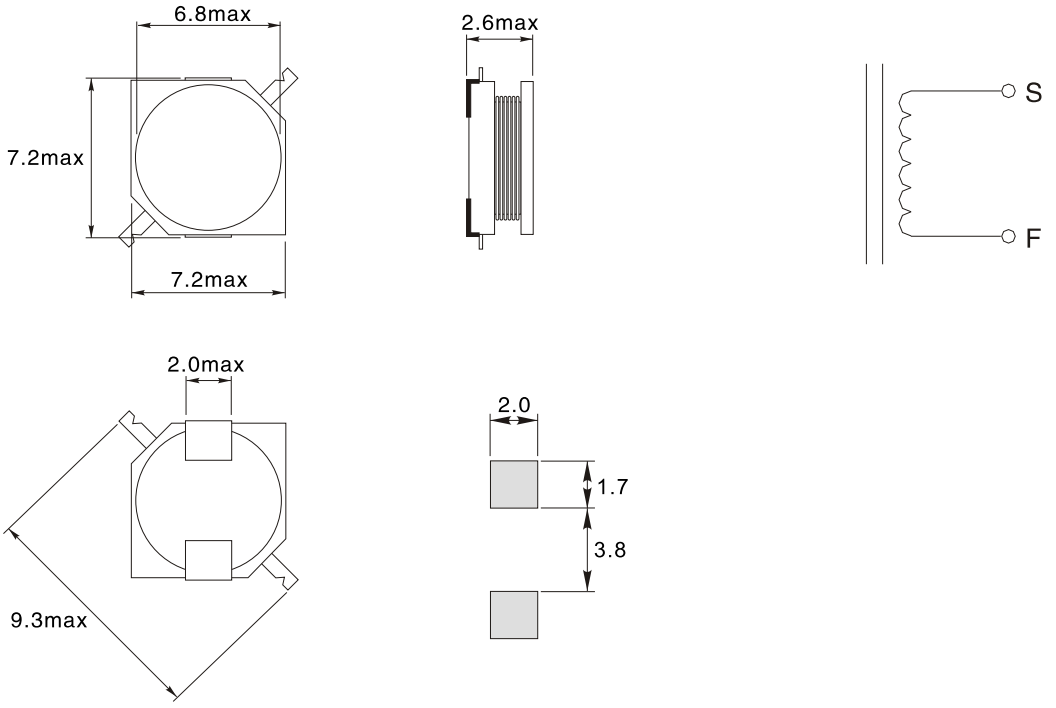
- Car access system PEPS (Passive Entry, Passive Start)
- RFID (radio-frequency identification) systems at 125 kHz

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (mH)	Test frequency (KHz)	Impedance (Ω)	Q
SDTR7026-192	1.97±5%	125	20	50
SDTR7026-232	2.38±5%	125	29	50
SDTR7026-332	3.3±5%	125	30	50
SDTR7026-412	4.15±5%	125	54	50
SDTR7026-472	4.7±5%	125	76	43
SDTR7026-682	6.8±5%	125	95	50
SDTR7026-712	7.1±5%	125	97	50
SDTR7026-812	8.1±5%	125	100	50
SDTR7026-902	9.0±5%	125	110	50
SDTR7026-103	10.0±5%	125	132	50

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



Note:

Sensitivity: 23mV/μT Max

Operating temperature: -40℃ to +85℃

Storage temperature: -40℃ to +105℃

Low–frequency receiving antenna

SDTR 9018/9028 SERIES

FEATURES:

- Ruggedized design to pass drop testing
- AEC–Q200 qualified
- Suitable for lead–free reflow soldering
- RoHS–compatible

APPLICATIONS:

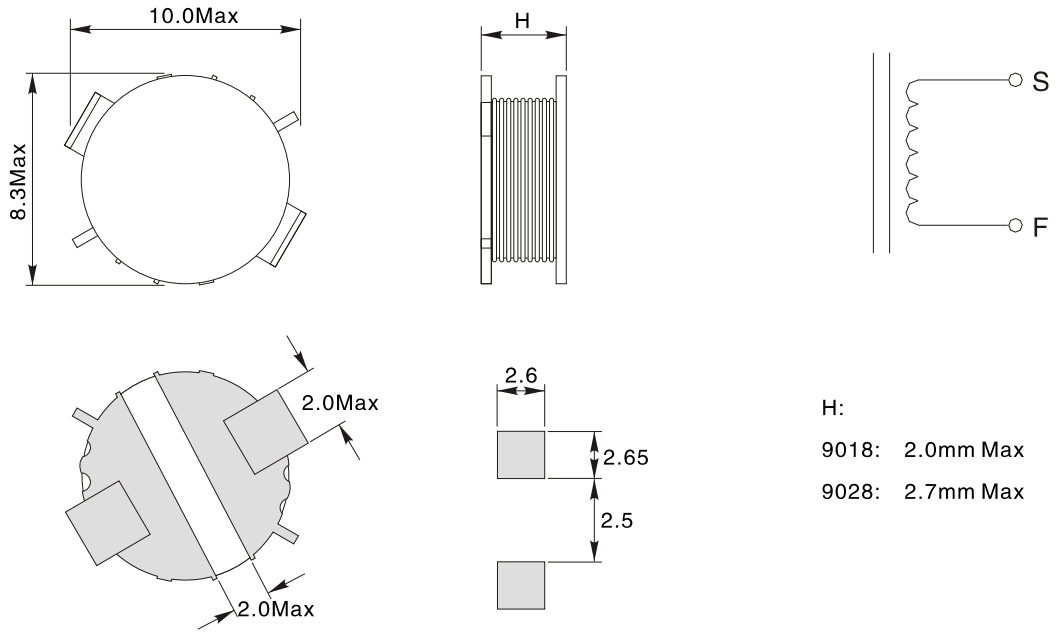
- Car access system PEPS (Passive Entry, Passive Start)
- RFID (radio–frequency identification) systems at 125 kHz

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (mH)	Test frequency (KHz)	Impedance (Ω)	Q
SDTR9018/9028–192	1.97 ± 5%	125	20	30
SDTR9018/9028–232	2.38 ± 5%	125	29	30
SDTR9018/9028–332	3.3 ± 5%	125	30	30
SDTR9018/9028–412	4.15 ± 5%	125	54	45
SDTR9018/9028–502	4.99 ± 5%	125	76	45
SDTR9018/9028–682	6.8 ± 5%	125	95	45
SDTR9018/9028–712	7.1 ± 5%	125	97	45
SDTR9018/9028–812	8.1 ± 5%	125	100	45
SDTR9018/9028–902	9.0 ± 5%	125	110	45
SDTR9018/9028–103	10.0 ± 5%	125	132	45

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



H:

9018: 2.0mm Max

9028: 2.7mm Max

Note:

Induced current: 22A Max,Duty 30%

Operating temperature: –40℃ to +85℃

Storage temperature: –40℃ to +105℃