

**⊕ Feature**

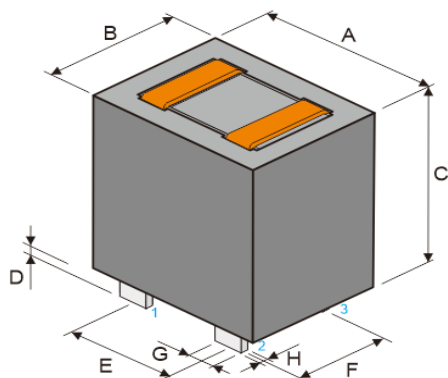
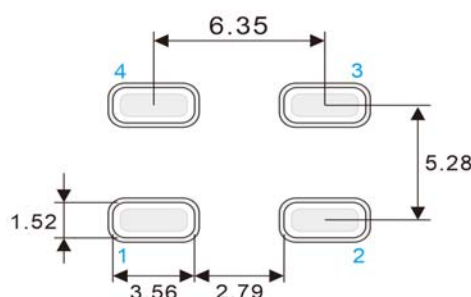
- High current saturation.
- Magnetically Shielded Structure.
- Lowest DCR /  $\mu\text{H}$ , in this package size.

**⊕ Applications**

- DC to DC converters.
- Power line filtering.
- DVC/DSC/PDA, LCD display.

**⊕ Product Identification :**


Series name	Dimensions(LxWxH)		Internal code	Inductance		Tolerance	
DCM	131015	13.7*10.4*15.2mm	P2S=2 set of wires	161	160 $\Omega$	-	-

**⊕ Shapes And Dimensions**

**⊕ Recommended PCB Pattern**


Part No.	Dimensions(mm)								
	A	B	C	D	E	F	G	H	
DCM131015P2S161	13.7	10.4	15.30	3.05	6.35	5.28	3.00	1.00	
	$\pm 0.30$	$\pm 0.30$	$\pm 0.30$	$\pm 0.40$	$\pm 0.30$	$\pm 0.30$	$\pm 0.10$	$\pm 0.10$	

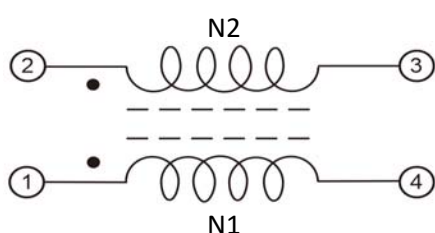
**⊕ Electrical Characteristics :**

Part No.	Impedance		Rated Current		DCR		Inductance	Test Frequency
	( $\Omega$ )	( $\Omega$ )	(A)	(A)	(m $\Omega$ )	(m $\Omega$ )		
DCM131015P2S161	120	160	30.0	35.0	0.5	0.2	1.2	Z : 100MHz/0.05V L : 1KHz/0.25V
	Min	Typ	Max	Typ	Max	Typ		

※Rated Current : DC Current that will cause an approximate  $\Delta T$  of 40°C.

※All test data is referenced to 25°C ambient.

※Test Instrument : Impedance (HP4191A), DCR(HIOKI RM3542A), Rated Current (WK3260B+WK3265B) or equivalent.

**⊕ Equivalent Circuit Schematic :**

**⊕ Material List :**

No.	Location	Material
1	Core	SH Ferrite Core
2	Wire	Flat Type Copper Wire
3	Cover	Bakelite
4	Glue	Resin

1. Operating temperature -40°C ~ +125°C

2. Storage conditions -40°C ~ +125°C

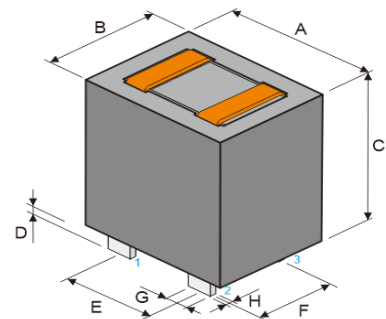
**TEST DATA FOR PREPRODUCTION SAMPLES**

Customer		Test Date	2023-4-22		
RSiN Part No.	DCM131015P2S161	Sample Quantity	5	PCS	
Lot No		Test Temp	25°C	Test Humidity	62%

MEAS Item	Z (Ω)			DCR (mΩ)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	
SPEC	120			0.50	13.70	10.40	15.30	3.05	6.35	5.28	
Upper	-			0.50	14.00	10.70	15.60	3.45	6.65	5.58	
Lower	120			-	13.40	10.10	15.00	2.65	6.05	4.98	
Tolerance	Min			Max	0.30	0.30	0.30	0.40	0.30	0.3	
Test Freq.	100MHz/0.05V										
1	183.2			0.24	13.61	10.33	15.24	3.25	6.11	5.25	
2	176.9			0.24	13.62	10.32	15.23	3.37	6.23	5.31	
3	177.5			0.24	13.62	10.34	15.18	3.31	6.18	5.30	
4	178.9			0.24	13.60	10.33	15.22	3.34	6.24	5.28	
5	177.8			0.22	13.64	10.32	15.26	3.32	6.24	5.26	
6											
7											
8											
9											
10											
Average	178.86			0.236	13.62	10.33	15.23	3.32	6.20	5.28	
Max	183.20			0.240	13.64	10.34	15.26	3.37	6.24	5.31	
Min	176.90			0.220	13.60	10.32	15.18	3.25	6.11	5.25	
Range	6.30			0.020	0.04	0.02	0.08	0.12	0.13	0.06	
StDevP	2.27			0.008	0.01	0.01	0.03	0.04	0.05	0.02	

**Test Instrument**

Z           HP4191A or equivalent.  
 DCR        HIOKI RM3542A or equivalent.  
 Isat&Irms   WK3260B+WK3265B or equivalent.

**Configuration**


Coil Spec :

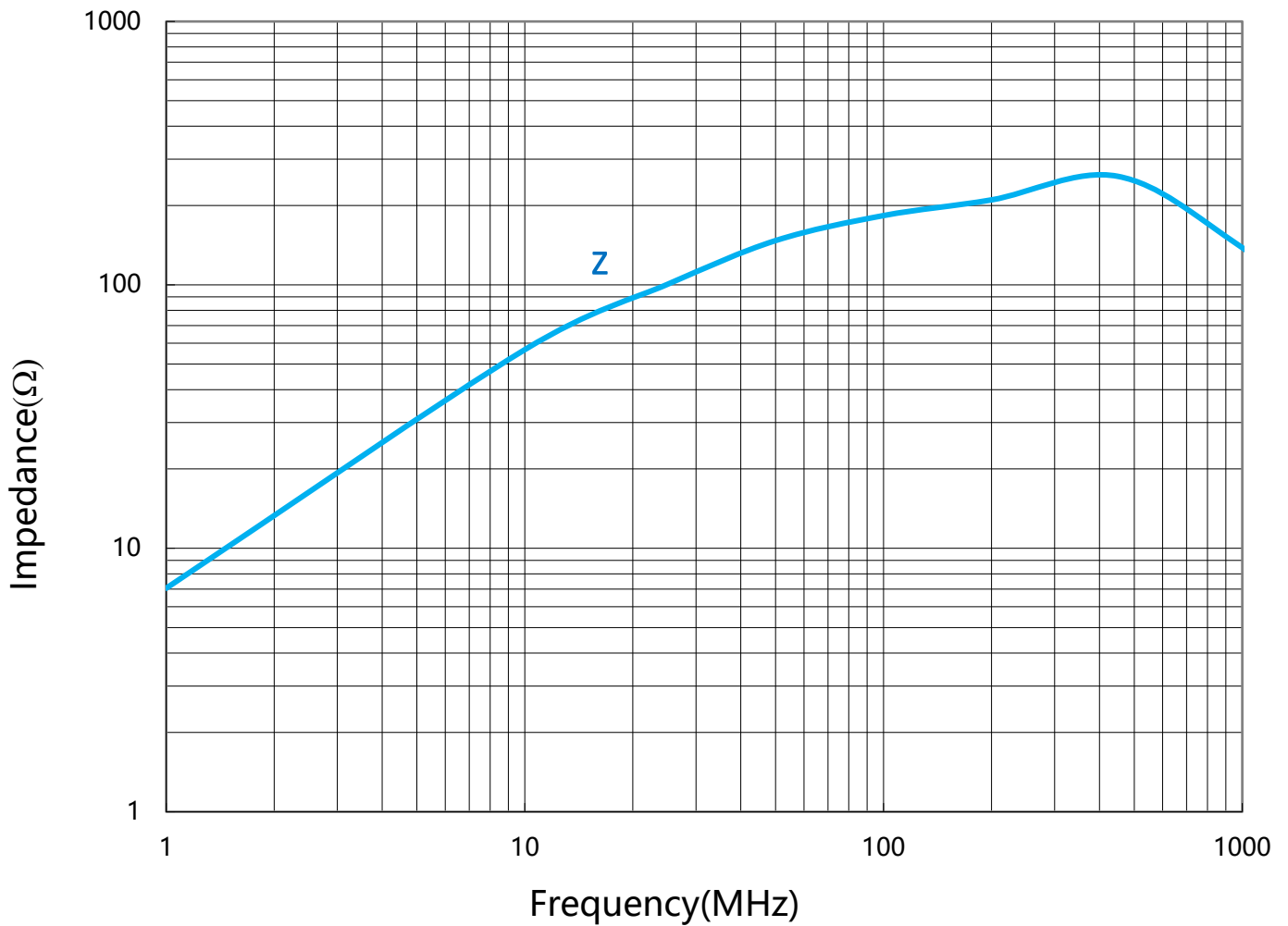
Drawn by	Checked by	Approved by
davy	amanda	Vincent

**⊕ Test Curve**

ITEM \ Z \ Freq	1	10	25	50	100	200	450	1000	3000
Z	7.1	56.8	100.5	147.2	183.2	210.1	258.3	138.4	45.3

**⊕ Test Condition**

Winding	P180 Grd1	Test Instruments	Agilent 4291B or equivalent.
---------	-----------	------------------	------------------------------


**⊕ Remark**