WPC A11 Wireless Charging Module

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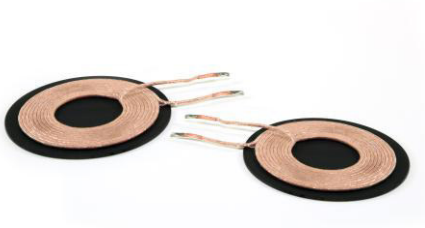


FEATURES

- Designed to meet WPC Qi Standard, power transmitter design A11 compliant
- Operating temperature -40℃ to +125℃
- Assembled with ferrite plate which is built with WPC listed ferrite material, high Q for maximum power transmission

APPLICATIONS

- Wireless charger for general electronic device or aftermarket accessories
- Wireless charger for office, residential or public area application
- Wireless charger for power tools or any other devices that need contactless power
- Wireless charging embedded solution for automobile central console, arm rest…etc

ELECTRICAL SPECIFICATIONS

PART NUMBER	INDUCTANCE (μH ± 10%)			DCR Max (mΩ)	Q @ 100 KHz/1V (MIN)
	MIN	NOM	MAX		
RWC5050AK060-500	5.85	6.50	7.15	50	70

1. Inductance tested at 100KHz,1V
2. Operating temperature range: -40℃ ~ +125℃ (Including self-heating)
3. Storage temperature range (packaging conditions): -10℃ ~ +40℃ and RH 70%(MAX)

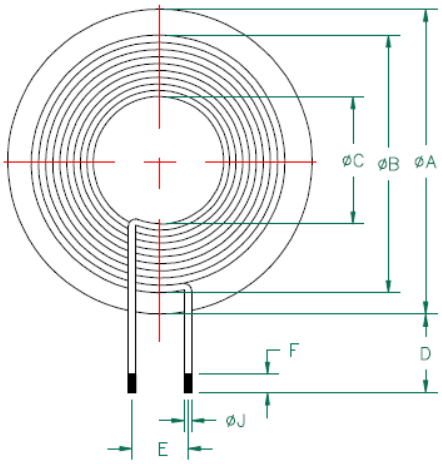
SHAPES AND DIMENSIONS

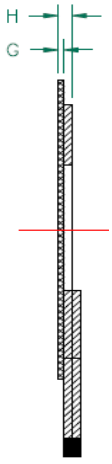
Unit:mm

A	B	C
50.00±0.50	44.00±1.50	20.50±0.50

D	E	F
17.00 Min.	10.00 Ref.	5.00±2.00

G	H	J
1.00±0.10	3.00 Max.	1.20 Ref.





PART NUMBER SYSTEM EXAMPLE

RWC	5050	AK	060	-	500
Coil Type	Part Size Code	Height Code	Inductance Code		Catalog or Custom Information

USA: +1.423.308.1690
Europe: +42.0.4885.7511.1
Asia: +86.757.2563.8860

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MCP-DS-WPC A11 REV1.0 1213

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Wireless Charging Transmitter Coil Assembly *for* Wearables and Small Electronic Device

FEATURES

- Assembled with 3D-shaped ferrite shielding and Litz coil
- For low power application (up to 1.5A or 5W)
- Compatible with tightly coupled charging standard (e.g., WPC)
- Wide operating temperature -40℃ to +85℃

APPLICATIONS

- Wireless power transmitter for wearables, electronic gadgets, smart car keys (FOB), small medical devices that requires contactless charging for convenience, hygiene or water proof
- General low power wireless charging applications requires contoured ferrite for better efficiency in limited space

ELECTRICAL SPECIFICATIONS

PART NUMBER	INDUCTANCE (μH)			DCR Max (mΩ)
	MIN	NOM	MAX	
RWC2727AH070-300	5.00	5.50	6.00	48.3

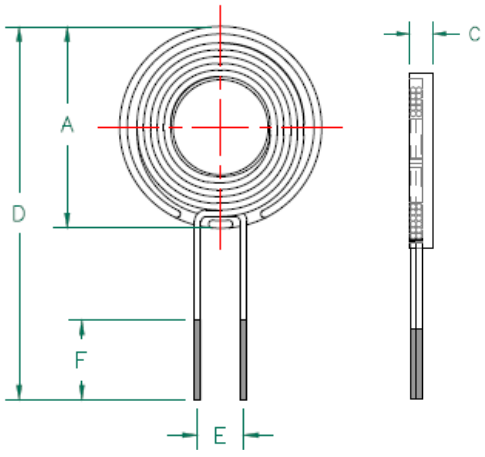
1. Inductance tested at 200KHz,1V
2. Operating temperature range: -40°C ~ +85°C (Including self-heating)
3. Storage temperature range (packaging conditions): -10°C ~ +40°C and RH 70%(MAX)

SHAPES AND DIMENSIONS

Unit:mm

A	C	D
27.00±0.40	4.20 Max.	49.36±3.00

E	F
7.00 Typ.	10.00±2.00



PART NUMBER SYSTEM EXAMPLE

RWC	2727	AH	070	-	300
Coil Type	Part Size Code	Height Code	Inductance Code		Catalog or Custom Information

USA: +1.423.308.1690
Europe: +42.0.4885.7511.1
Asia: +86.757.2563.8860

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WPC A1 Wireless Charging Module

Smart Technology. Delivered.

FEATURES

- Designed to meet WPC Qi Standard, power transmitter design A1 compliant
- Operating temperature -40℃ to +125℃
- Assembled with ferrite plate which is built with WPC listed ferrite material, high Q for maximum power transmission

APPLICATIONS

- Wireless charger for general electronic device or aftermarket accessories
- Wireless charger for office, residential or public area application
- Wireless charger for power tools or any other devices that need contactless power
- Wireless charging embedded solution for automobile central console, arm rest…etc

ELECTRICAL SPECIFICATIONS

PART NUMBER	INDUCTANCE (μH ± 10%)			DCR Max (mΩ)	Q @ 100 KHz/1V (MIN)	SATURATION CURRENT (A) MAX	RMS CURRENT (A) MAX
	MIN	NOM	MAX				
RWC5353EJ240-500	21.6	24.0	26.4	75	90	10.0	5.5
RWC5353EJ240-501	21.6	24.0	26.4	75	90	10.0	5.5

1. Inductance tested at 100KHz,1V
2. Operating temperature range: -40℃ ~ +125℃ (Including self-heating)
3. Storage temperature range (packaging conditions): -10℃ ~ +40℃ and RH 70%(MAX)
4. Unless otherwise specified, the standard atmospheric conditions for measurement/test as:
   A. Ambient temperature: 20℃±15℃
   B. Relative humidity: 65%±20%
5. Definition of saturation current (ISAT): DC current at which the inductance drops <= 10% from its value without current.
6. Definition of temperature rise current (IRMS): DC current that causes the temperature rise (ΔT<=40%℃) from 20℃ ambient.

SHAPES AND DIMENSIONS

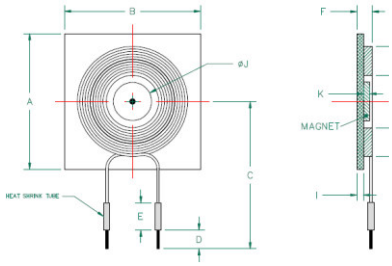
Unit:mm

PART NUMBER	A	B	C
RWC5353EJ240-500	53.00±0.50	53.00±0.50	57.5 Typ.
RWC5353EJ240-501			

PART NUMBER	D	E	F
RWC5353EJ240-500	10.00±2.00	10.0 Typ.	6.7 Max
RWC5353EJ240-501			

PART NUMBER	G	H	I
RWC5353EJ240-500	43.00±1.00	20.50±1.00	2.50±0.40
RWC5353EJ240-501			

PART NUMBER	J	K
RWC5353EJ240-500	15.00±0.50	2.50±0.50
RWC5353EJ240-501	/	/



PART NUMBER SYSTEM EXAMPLE

RWC	5353	EJ	240	-	500
Coil Type	Part Size Code	Height Code	Inductance Code		Catalog or Custom Information

USA: +1.423.308.1690
Europe: +42.0.4885.7511.1
Asia: +86.757.2563.8860

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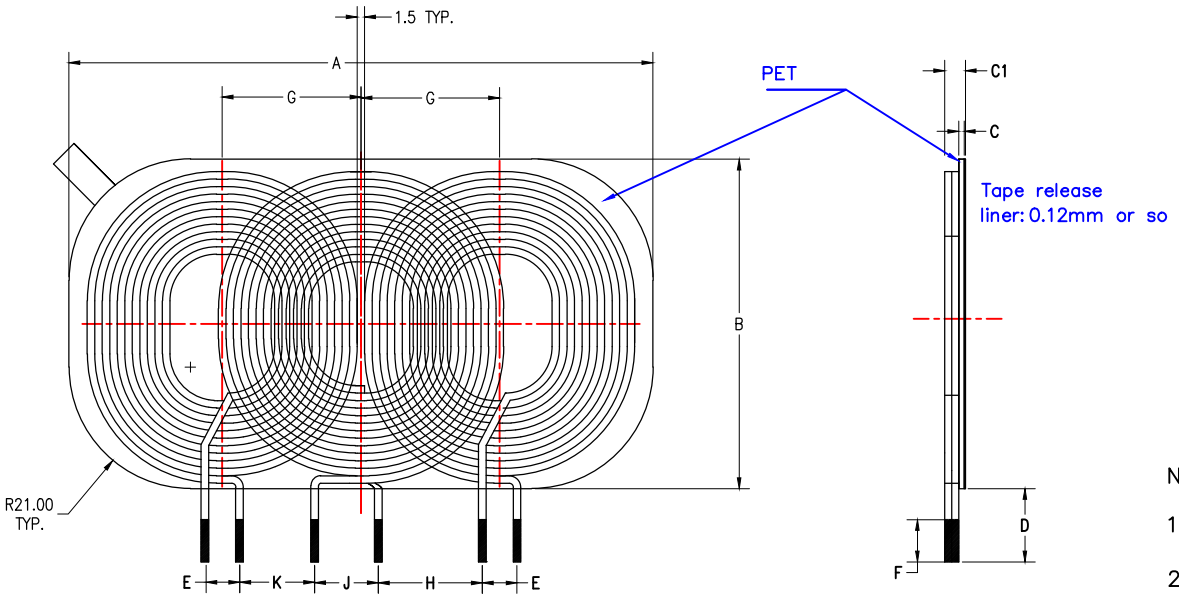
MCP-DS-WPC A1 REV1.1 0414

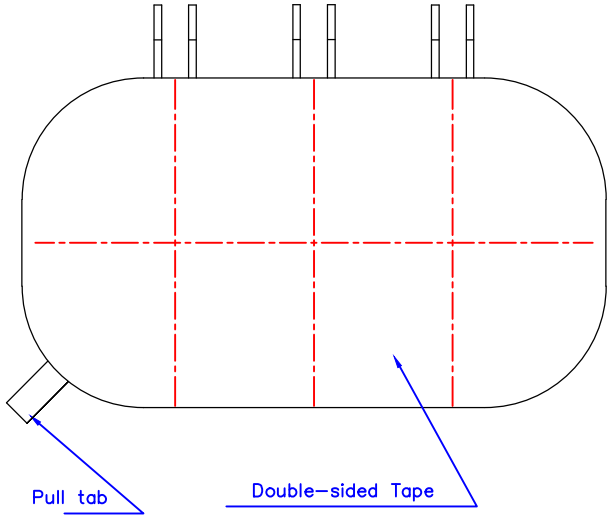


PHYSICAL DIMENSIONS:

A	101.00	±	2.00
B	57.00	±	2.00
C	0.90	±	0.10
C1	4.00		Max.
D	8.00	±	2.00
E	6.00		Ref.
F	4.00		Ref.
G	24.40	±	2.00
H	18.40		Ref.
J	11.0		Ref.
K	13.40		Ref.

NOTES: UNLESS OTHERWISE SPECIFIED

1. OPERATING TEMPERATURE RANGE:
   −40℃ TO +70℃ (INCLUDING SELF−HEATING).
2. STORAGE TEMPERATURE RANGE (PACKAGING CONDITIONS) :
   −10℃ TO +40℃ AND RH 70% (MAX.)
3. COIL: USTC LITZ WIRE 0.06X200 STRANDS.
4. ▽C NEED CPK>1.33.
5. PET和 DOUBLE-SIDED TAPE盖住磁片。
6. 丝包线不能露铜。
7. Tape满足85度要求。



RoHS

ELECTRICAL SPECIFICATION @ 25℃

	Min	Nom	Max
INDUCTANCE (uH) ▽C L1,2 & L5,6 100KHz/0.5V (±10%)	8.82	9.80	10.78
INDUCTANCE (uH) ▽C L3,4 100KHz/0.5V (±10%)	9.18	10.20	11.22
DCR1,2& 5,6 (Ω)			0.060
DCR3,4 (Ω)			0.065

REV	DESCRIPTION	DATE	INT
A	NEW RELEASE	12/17/19	YC

DIMENSIONS ARE IN mm.

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PROJECT/PART NUMBER:	REV	PART TYPE:	DRAWN BY:
SWC9756AK100−715	A	--	YC

DATE:	SCALE:	MATERIAL:
12/17/19	1:1	−−

CAD # SWC9756AK100−715−A

TOOL # −