

May 2019

Wireless Power Transfer

Tx Coil Modules (WPC Compliant)

WTM905525-12F2-12V-G

Wireless Power Transfer Tx Coil Modules (WPC Compliant)



公TDK

WTM905525-12F2-12V-G

FEATURES

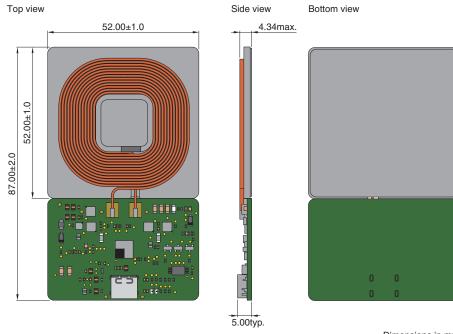
- O Turnkey solution for wireless power transfer, including transmitter coil and circuit
- 12V input wireless power consortium (WPC1.2.2) type MP-A2 transmitter system
- Fully WPC compliant, including foreign object detection (FOD) method

APPLICATIONS

O Information and communication products

O Industrial, medical and other products

SHAPE & DIMENSIONS



Dimensions in mm

AIR COIL SPECIFICATIONS

Number of Coils	Wire Diameters	Coil Turns
1	ø0.08mm x 105 strands	12 / layer, total 1 layer

O Description of icons: See the following for more details. https://product.tdk.com/info/en/environment/icon.html

• Before using these products, be sure to request the delivery specifications.

[·] All specifications are subject to change without notice.

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MAXIMUM RATINGS

Operating Temperature / Humidity	Storage Temperature / Humidity
-30 to +70°C / 10 to 95% R.H.	–40 to +85°C / 10 to 95% R.H.

ELECTRICAL CHARACTERISTICS

Tx Module				
WPC Compliant	Input Voltage	Transfer Power	Efficiency	
WPC Compliant	(V)	(W)	(%) typ.	
Yes	12	15	75	

Test Environment :

Test Instrument : Chroma 8000 system or EQUIVALENT Ambient Temperature : 20 to 30 °C Relative Humidity : 25 to 75 %R.H. Rx module : WRM483265-10F5-12V-G Tx & Rx coil distance : 3.4mm

IC INFORMATIONS

IC	Manufacturer
P9242-R	IDT (Integrated Device Technology)

* Please contact us for more detail.

PACKAGING : BOX TYPE

Dimensions (mm)		Quantity (pcs)	
Tray	365x275x10	Qty per tray	10
Small carton	388x281.5x40	Qty per small carton	30
Outer carton	404x298x108	Qty per outer carton	60

OTHERS

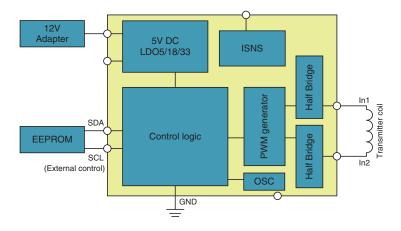
Weight	
(g) typ.	
50	

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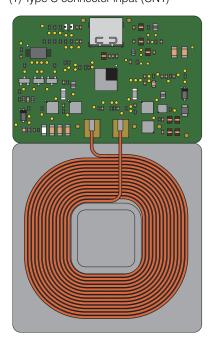
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BLOCK DIAGRAMS



PIN LAYOUTS

Pin Configuration
(1) Type C connector input (CN1)



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\triangle	Reminders
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- O Do not use or store in locations where there are conditions such as gas corrosion (salt, acid, alkali, etc.).
- Self heating (temperature increase) occurs when the power is turned ON, so the tolerance should be sufficient for the set thermal design.
- O Fully caution, if metal piece contacted with top of coil surface then it could be danger of generated heat.
- Do not use for a purpose outside of the contents regulated in the delivery specifications.
- O The products listed on this catalog are intended for use in general electronic equipment (AV equipment, telecommunications equipment, home appliances, amusement equipment, computer equipment, personal equipment, office equipment, measurement equipment, industrial robots) under a normal operation and use condition.

The products are not designed or warranted to meet the requirements of the applications listed below, whose performance and/or quality require a more stringent level of safety or reliability, or whose failure, malfunction or trouble could cause serious damage to society, person or property.

If you intend to use the products in the applications listed below or if you have special requirements exceeding the range or conditions set forth in the each catalog, please contact us.

- (1) Aerospace/aviation equipment
- (2) Transportation equipment (cars, electric trains, ships, etc.)
- (3) Medical equipment
- (4) Power-generation control equipment
- (5) Atomic energy-related equipment
- (6) Seabed equipment
- (7) Transportation control equipment

- (8) Public information-processing equipment
- (9) Military equipment
- (10) Electric heating apparatus, burning equipment
- (11) Disaster prevention/crime prevention equipment
- (12) Safety equipment
- (13) Other applications that are not considered general-purpose applications

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