



# Wireless Power Transfer

Tx (transmitting) coil modules (WPC compliant)

WTM505090-10K2-5V-G1



# **Wireless Power Transfer**

Product compatible with RoHS directive Halogen-free

Tx (transmitting) coil modules (WPC compliant)

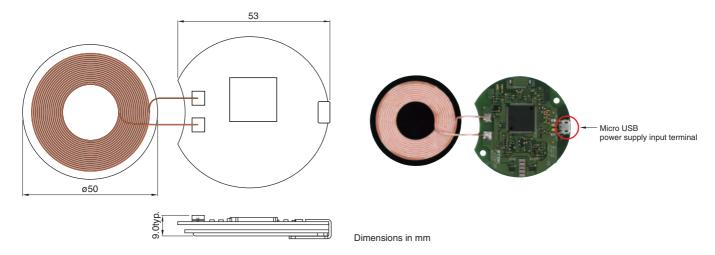
# Overview of WTM505090-10K2-5V-G1

### **FEATURES**

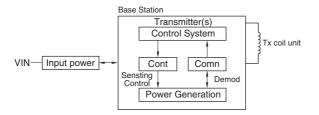
- O This is Tx turnkey solution including transmitter coil
- O Fully WPC compliant, including foreign object detection (FOD) method
- 5V operation with wireless power consortium (WPC1.1) type A11 transmitter system
- OPre cracked ferrite is available for durable construction



#### ■ SHAPE & DIMENSIONS



### BLOCK DIAGRAM



#### **ELECTRICAL CHARACTERISTICS**

#### **CHARACTERISTICS SPECIFICATION TABLES**

Tx coil units		Tx modules				Part No.
Inductance	DC resistance	IC information	Input voltage	WPC compliant	Efficiency	
[100kHz, 1Vrms]	[25°C]					
(μH)	( $\Omega$ )max.		(V)		(%)	
	0.06	TB6865AFG	4.75 to 5.2	WPC 1.1 Type A11	70	WTM505090-10K2-5V-G1

- RoHS Directive Compliant Product: See the following for more details.https://product.tdk.com/info/en/environment/rohs/index.html
- O Halogen-free: Indicates that CI content is less than 900ppm, Br content is less than 900ppm, and that the total CI and Br content is less than 1500ppm.



## Reminders

- On not use or store in locations where there are conditions such as gas corrosion (salt, acid, alkali, etc.).
- Oself 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.
- O Do not use for a purpose outside of the contents regulated in the delivery specifications.
- 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