



## CMR003C

### 3W Magnetic Resonant Wireless Power Receiver Module

CMR003C, is a 3W wireless power receiver module using magnetic resonant wireless power technology. Thanks to its high frequency nature, it can output up to 3W (5V/0.6A) at every point within the wide power area of CMT003B wireless power transmitter. Therefore, multiple of CMR003C wireless power receivers, usually two, can be powered simultaneously by CMT003B. It makes it quite suitable for applications like smart shoes and gaming pads which need drop-and-go user experience for charging.

#### Key Features:

- Up to 3W output power with 6.78MHz magnetic resonant wireless power technology
- Small coil size (40mm x 40mm)
- Small board size (20mm x 20mm)
- Able to be charged within wide power area with Z height spatial freedom up to 30mm on CMT003B wireless power transmitter
- 85%+ Receiver efficiency
- Operating Temperature: 0°C~+50°C
- FCC part.18 pre-certification passed

#### Specification:

<b>Power Input Interface</b>	Wireless Power coil (40mm x 40mm)
<b>Output Power</b>	Up to 3 W (5V/0.6A)
<b>Power coil Area (X &amp; Y)</b>	40 mm (l) x 40 mm (w)
<b>Power Distance (Z)</b>	10mm ~ 30mm (On CMT003B)
<b>Dimension</b>	<b>CMR003C Control Board:</b> 20 mm (l) x 20 mm (w) x 3.9 mm (h) <b>CMR003C Coil Board:</b> 40 mm (l) x 40 mm (w) x 1 mm (h)
<b>Coil Type</b>	PCB type

## Electrical Specification:

Test with CMT003B @ 20 mm Z-height

Characteristics	Condition	Min.	Typ.	Max.	Units
Output Voltage	Normal Voltage Mode	4.5	5	5.5	Volts
Output Current	Offset x = 0cm, y = 0cm, z = 20mm		0.6		Amp
	Offset x ± 4.5cm, y ± 1.5cm, z = 20mm		0.6		Amp
	Offset x ± 9cm, y ± 1.5cm, z = 20mm		0.6		Amp
Output Power	P, offset x = 0cm, y = 0cm, z = 20mm		3		Watt
	P, offset x ± 3cm, y ± 1.5cm, z = 20mm		3		Watt
	P, offset x ± 6cm, y ± 1.5cm, z = 20mm		3		Watt
	P, offset x ± 9cm, y ± 1.5cm, z = 20mm		3		Watt
Receiver Efficiency @ 3.0W			85		%
Operating Temperature		0		50	°C
Surface Temperature				80	°C
Storage Temperature		-40		70	°C

## Environmental Specification:

- **Operating Condition:**

Temperature range: 0°C ~ +50°C

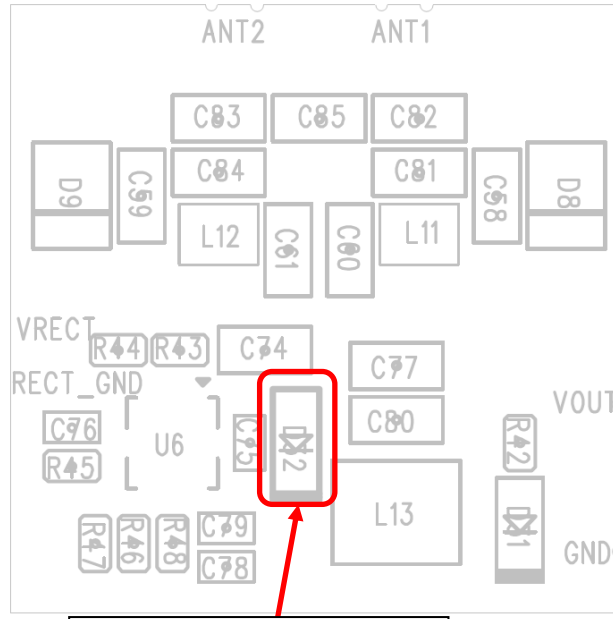
Humidity: 10% ~ 90 %

- **Storage Condition:**

Temperature range: -20°C ~ +70°C

Humidity: 10% ~ 90 %

**LED indicator:  
CMR003C PRU**



D31: Power state (Yellow)

**Mechanical Specification:**

Coil board Dimension	40 mm (l) x 40 mm (w) x 1 mm (h)
Control board Dimension	20 mm (l) x 20 mm (w) x 3.9 mm (h)

