

EPCOS Sample Kit 2019

# Transponder Coils

for Automotive Applications



## Transponder Coils for Automotive Applications

	Parameters	TC1210 (X/Y axis)			TC1812 (Z axis)			8 mm (X/Y axis)					
TPMS	$L_R$ mH	1.08			1.34			2.38			18.52		
	Sensitivity <sub>typ</sub> mV/μT	3.4			3.7			7.6			50		
	$Q_{min}$	15			15			25			30		
	$f_{res, min}$ MHz	2.5			2.0			1.5			0.4		
	Dimensions mm	3.2 x 2.5 x 2.2			3.2 x 2.5 x 2.2			4.5 x 3.2 x 3.2			7.8 x 2.7 x 2.7		
	Ordering code	B82450A1084C00*			B82450A1344C00*			B82451A2384D000			B82450A1855E001		
	Parameters	7 mm (Z axis)			8 mm (X/Y axis)			11 mm (X/Y axis)					
Passive Entry / Passive Start (PEPS)	$L_R$ mH	4.81			7.20			2.36			7.20		
	Sensitivity <sub>typ</sub> mV/μT	16			28			30			52		
	$Q_{min}$	46			35			50			40		
	$f_{res, min}$ MHz	1.0			1.0			2.0			1.0		
	Dimensions mm	7.7 x 7.4 x 2.65			7.8 x 2.7 x 2.7			11.4 x 3.5 x 2.4			11.4 x 3.5 x 2.4		
	Ordering code	B82451L4814E402			B82450A7204E000			B82450A2364A000			B82450A7204A000		
	Parameters	3D coil											
Axis	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	
$L_R$ mH	4.75	4.75	5.85	4.75	4.75	7.20	6.30	6.30	9.00	6.75	6.75	13.20	
Sensitivity <sub>typ</sub> mV/μT	60	57	45	60	57	50	75	70	63	77	73	83	
$Q_{min}$	23.5	23.5	19.0	23.5	24.5	19.5	23.5	24.5	19.5	23.5	24.5	19.5	
$f_{res, min}$ MHz	600	600	400	600	600	400	440	460	360	430	450	300	
Dimensions mm	12.5 x 11.5 x 3.6			12.5 x 11.5 x 3.6			12.5 x 11.5 x 3.6			12.5 x 11.5 x 3.6			
Ordering code	B82453C0300A000			B82453C0203A000			B82453C0285A000			B82453C0270A000			
$f_L$ ; $f_S$ ; $f_Q$	125 kHz (all products)												

## PEPS



3D coil  
4.75/4.75/5.85 mH



7 mm  
4.81 mH



3D coil  
4.75/4.75/7.20 mH



8 mm  
7.20 mH



3D coil  
6.30/6.30/9.00 mH



11 mm  
2.36 mH



3D coil  
6.75/6.75/13.20 mH



11 mm  
7.20 mH

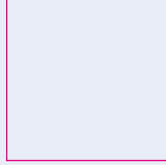
## TPMS



TC1210  
1.08 mH



TC1210  
1.34 mH



TC1812  
2.38 mH



8 mm  
18.52 mH

**Important information:** It is incumbent on the customer to check and decide whether a product is suitable for use in a particular application. Our products are described in detail in our data sheets. Our *Important notes* and the product-specific *Cautions and warnings* must be observed. All relevant information is available through our sales offices.