

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 _{typ} 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 _{typ} 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 _{typ} 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_0	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.