



DM-M13-018

1/2

Date: 13 May 2013

Messr.

PK COMPONENTS ELEKT.BAUELEM. VERTR. GMBH

Sensor Products Department 2

Sensor Product Division

Murata Manufacturing Co.,Ltd.

Approved by: K. Hashimoto
K.hashimoto

Issued by: Yoshihiro Yoshida
Y.Yoshida

Application for Material Change for
Magnetic Pattern Recognition sensor

We are planning material change for our sensor as below.

Please confirm the contents and return a second form filled with your answer.

Product Name	Magnetic Pattern Recognition Sensor	Murata P/N	BS05T1HGNA
		Customer P/N	BS05T1HGNA
Reason	<p>It is confirmed that similar products which are the same in structure as BS05T1HGNA tend to have carrier noise. Namely, BS05T1HGNA may have carrier noise as well.</p> <p>The causes were 1) the propagation of impact vibration to sensor elements, and 2) the vibration of the magnetic metal cover.</p> <p>To avoid carrier noise, the following modifications will be made.</p>		
Contents			Risks
	<p>1) -1 Change in shape of holder The sides of each MR-element are not in contact with adjacent MR-element or the case.</p> <p>1)-2 Change in adhesive resin.</p> <p>2) Change in hardness grade of cover material:SUS304. From 3/4H to 1/2H.</p>	<p>1) No possible effect on the characteristics.</p> <p>2) 1.1 to 1.2 times abrasion loss comparing to SUS304-3/4H. Abrasion resistance will decline.</p> <p>See the attached pdf document.</p>	
<p>These material changes “1), 2)” will be made after running out of our current material stock. Moreover, the both changes may not be made at the same time.</p> <p>We would greatly appreciate your understanding in this matter.</p>			



Response Form

Date

To Sensor Products Department 2
Sensor Product Division
Murata Manufacturing Co.,Ltd.

Company Name:

Accepted by

Subject	Material Change for Magnetic Pattern Recognition sensor against the carrier noise problem.
Answer	<input type="checkbox"/> Approve <input type="checkbox"/> Approve with conditions <input type="checkbox"/> Disapprove
Remarks	<hr/> <hr/>

Please return this completed form by 31st May, 2013.