

 <small>physical. chemical. biological.</small>	ECR - Engineering Change Request ECN - Engineering Change Notice	A19-017																					
ECN Classification:	Class II (customer notification only, no approval required)																						
Project:	SMD with Soft Termination	Release by <input type="checkbox"/> Customer <input checked="" type="checkbox"/> IST: Date / Signature <u>see page 2</u> Name (in block letters)/ Position																					
Division:	R&D																						
Product:	See product list in attachment																						
Customer:	all																						
Abstract of change:	Change of wrap around contacts (end termination) for surface mount devices																						
Attachment:	<input checked="" type="checkbox"/> Datasheet <input checked="" type="checkbox"/> Product List																						
<p>Reason(s) for change: The scope of the change is a technology upgrade to end termination according to the state-of-the-art technology and make the sensor more robust in the customer's application.</p> <p>The aim of the technology upgrade is to improve the following parameters:</p> <ul style="list-style-type: none"> - Improved process reliability at soldering - Better long-term stability in thermal cycling and thermal shock conditions - Improved dimension reliability <p>There are no changes to the sensor characteristics or to the external dimensions (sensor length, width, height).</p>																							
<p>Change details: For the internal approval IST performed following tests:</p>																							
<table border="1"> <thead> <tr> <th>Test procedure</th> <th>Details:</th> <th>Comment:</th> </tr> </thead> <tbody> <tr> <td>Long-term stability</td> <td>Aging and Thermal cycling</td> <td>1000 h duration, passed</td> </tr> <tr> <td>Solderability</td> <td>J_STD-002E Test A + A1</td> <td>passed</td> </tr> <tr> <td>Dewetting</td> <td>J_STD-002E Test A + A1</td> <td>passed</td> </tr> <tr> <td>Reflow Soldering & Profile</td> <td></td> <td>recommended profile in datasheet</td> </tr> <tr> <td>Temperature Cycling & Shear Test</td> <td>IEC 62137-1-2</td> <td>ongoing, internal tests passed</td> </tr> </tbody> </table>			Test procedure	Details:	Comment:	Long-term stability	Aging and Thermal cycling	1000 h duration, passed	Solderability	J_STD-002E Test A + A1	passed	Dewetting	J_STD-002E Test A + A1	passed	Reflow Soldering & Profile		recommended profile in datasheet	Temperature Cycling & Shear Test	IEC 62137-1-2	ongoing, internal tests passed			
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<p>The new wrap around contact (WAC) is based on a metalized polymer paste. To prevent the dissolution of the base metallization in solder an additional galvanic plating nickel barrier layer and a tin layer as end termination for easy solderability and prevention of oxidation is plated.</p> <p>For the new manufacturing process the sensor design was optimized. Both, the passivation glass and the pad were improved in terms of chemical resistance.</p> <p>The table below gives an overview of all implemented changes and modifications:</p>																							
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Position	Name	Date & Signature
Quality Manager	Walter Zimmermann	17. Nov. 2021 
Team Leader Technology	Yannick Barb	17. Nov. 2021 

Attachment:

Affected Products / Product list:

Mat. No. Old	Mat. Name Old		Mat. Name New	Mat. No. New
100565	P1K0.0805.2P.B	-->	P1K0.0805.2ST.B	101865
100596	P1K0.0805.2P.B.S	-->	P1K0.0805.2ST.B.S	102023
100597	P0K1.0805.2P.B.S	-->	P0K1.0805.2ST.B.S	152446
100612	P0K1.0805.2P.B	-->	P0K1.0805.2ST.B	152441
100613	P0K1.0805.2P.A	-->	P0K1.0805.2ST.A	150043
100614	P0K1.0805.2P.A.S	-->	P0K1.0805.2ST.A.S	150044
100617	P0K5.0805.2P.A	-->	P0K5.0805.2ST.A	150045
100618	P0K5.0805.2P.B	-->	P0K5.0805.2ST.B	150046
100619	P0K5.0805.2P.B.S	-->	P0K5.0805.2ST.B.S	150049
100620	P1K0.0805.2P.A	-->	P1K0.0805.2ST.A	150028
100621	P1K0.0805.2P.A.S	-->	P1K0.0805.2ST.A.S	150029
100635	P0K1.0805.2P.C	-->	P0K1.0805.2ST.C	152445
100659	P1K0.0805.2P.C	-->	P1K0.0805.2ST.C	102020
100667	P0K5.0805.2P.C	-->	P0K5.0805.2ST.C	150047
100965	P1K0.0805.2P.A.S	-->	P1K0.0805.2ST.A.S	150037
100966	P1K0.0805.2P.B.S	-->	P1K0.0805.2ST.B.S	150038
100986	P0K1.0805.2P.B.S	-->	P0K1.0805.2ST.B.S	150035
101020	P0K1.0805.2P.A.S	-->	P0K1.0805.2ST.A.S	150034
101063	P1K0.0805.2P.K	-->		please contact IST
101068	P0K1.0805.2P.C.S	-->	P0K1.0805.2ST.C.S	150036
101105	P1K0.0805.2P.C.S	-->	P1K0.0805.2ST.C.S	150039
101229	P1K0.0805.2P.C.S	-->	P1K0.0805.2ST.C.S	102024
101328	P1K0.0805.2P.A.S	-->		please contact IST
101452	P1K0.0805.2P.K.S	-->		please contact IST
101572	P0K1.0805.2P.A.S	-->		please contact IST
101709	P0K5.0805.2P.A.S	-->	P0K5.0805.2ST.A.S	150040
102058	P1K0.0805.2P.A.S	-->		please contact IST
150023	P0K1.0805.2P.A.S	-->		please contact IST
152040	P0K1.0805.2P.B.S	-->		please contact IST
152050	P0K1.0805.2P.A.S	-->		please contact IST
152054	P1K0.0805.2P.B.S	-->		please contact IST
152055	P1K0.0805.2P.A.S	-->		please contact IST