Product/Process Change Notice - PCN 20_0026 Rev. -

Analog Devices, Inc. Three Technology Way Norwood, Massachusetts 02062-9106

This notice is to inform you of a change that will be made to certain ADI products (see Appendix A) that you may have purchased in the last 2 years. **Any inquiries or requests with this PCN (additional data or samples) must be sent to ADI within 30 days of publication date.** ADI contact information is listed below.

PCN Title: HMC903LP3E Data Sheet Limit Change

Publication Date: 16-Jan-2020

Effectivity Date: 16-Jan-2020 *(the earliest date that a customer could expect to receive changed material)*

Revision Description:
Initial Release.

Description Of Change:

Raise the maximum channel temperature from 150C to 175C.

Reason For Change:

The data sheet is being changed to accurately device capabilities.

Impact of the change (positive or negative) on fit, form, function & reliability:

The change described above has no impact on fit, form, or functionality of the device.

Product Identification *(this section will describe how to identify the changed material)*

Product Data sheet correction only. There is no change to product design.

Summary of Supporting Information:

Data sheet HMC903LP3E Rev I, Table3, Page 4, will reflect the channel temperature update to 175C. See Attachment 1 for data sheet comparison.

Supporting Documents

Attachment 1: Type: Datasheet Specification Comparison

ADI_PCN_20_0026_Rev_-_HMC903LP3E_spec comparison.pdf

For questions on this PCN, please send an email to the regional contacts below or contact your local ADI sales representatives.			
Americas:	**Europe:**	**Japan:**	**Rest of Asia:**
PCN_Americas@analog.com	PCN_Europe@analog.com	PCN_Japan@analog.com	PCN_ROA@analog.com

Appendix A - Affected ADI Models				
Added Parts On This Revision - Product Family / Model Number (2)				
HMC903G / HMC903LP3E	HMC903G / HMC903LP3ETR			

Appendix B - Revision History			
Rev	**Publish Date**	**Effectivity Date**	**Rev Description**
Rev. -	16-Jan-2020	16-Jan-2020	Initial Release.

ABSOLUTE MAXIMUM RATINGS

Table 3. REV H

Parameter	Rating
Drain Bias Voltage	4.5 V
RF Input Power	20 dBm
Gate Bias Voltage	
V_{GG1}	−2 V to +0.2 V
V_{GG2}	−2 V to +0.2 V
Continuous Power Dissipation, P_{DISS} (T_A = 85°C, Derate 6.9 mW/°C Above 85°C)	0.45 W
Channel Temperature	150°C
Maximum Peak Reflow Temperature	260°C
Storage Temperature	−65°C to +85°C
Operating Temperature	−40°C to +85°C
ESD Sensitivity (Human Body Model)	Class 0, Passed 150 V

Stresses at or above those listed under Absolute Maximum Ratings may cause permanent damage to the product. This is a stress rating only; functional operation of the product at these or any other conditions above those indicated in the operational section of this specification is not implied. Operation beyond the maximum operating conditions for extended periods may affect product reliability.

THERMAL RESISTANCE

Thermal performance is directly linked to printed circuit board (PCB) design and operating environment. Careful attention to PCB thermal design is required.

Table 4. Thermal Resistance

Package Type[1]	θ_{JC}	Unit
HCP-16-1	144.8	°C/W

[1] Thermal impedance simulated values are based on JEDEC 2s2p thermal test board. See JEDEC JESD51.

ESD CAUTION

ESD (electrostatic discharge) sensitive device. Charged devices and circuit boards can discharge without detection. Although this product features patented or proprietary protection circuitry, damage may occur on devices subjected to high energy ESD. Therefore, proper ESD precautions should be taken to avoid performance degradation or loss of functionality.

ABSOLUTE MAXIMUM RATINGS

Table 3. REV I

Parameter	Rating
Drain Bias Voltage	4.5 V
RF Input Power	20 dBm
Gate Bias Voltage	
V_{GG1}	−2 V to +0.2 V
V_{GG2}	−2 V to +0.2 V
Continuous Power Dissipation, P_{DISS} (T_A = 85°C, Derate 6.9 mW/°C Above 85°C)	0.45 W
Channel Temperature	175°C
Maximum Peak Reflow Temperature	260°C
Storage Temperature	−65°C to +85°C
Operating Temperature	−40°C to +85°C
ESD Sensitivity (Human Body Model)	Class 0, Passed 150 V

Stresses at or above those listed under Absolute Maximum Ratings may cause permanent damage to the product. This is a stress rating only; functional operation of the product at these or any other conditions above those indicated in the operational section of this specification is not implied. Operation beyond the maximum operating conditions for extended periods may affect product reliability.

THERMAL RESISTANCE

Thermal performance is directly linked to printed circuit board (PCB) design and operating environment. Careful attention to PCB thermal design is required.

Table 4. Thermal Resistance

Package Type[1]	θ_{JC}	Unit
HCP-16-1	144.8	°C/W

[1] Thermal impedance simulated values are based on JEDEC 2s2p thermal test board. See JEDEC JESD51.

ESD CAUTION

ESD (electrostatic discharge) sensitive device. Charged devices and circuit boards can discharge without detection. Although this product features patented or proprietary protection circuitry, damage may occur on devices subjected to high energy ESD. Therefore, proper ESD precautions should be taken to avoid performance degradation or loss of functionality.