

Product/Process Change (PCN) Notification

PCN Number: CO-20650

Date Issued: June 28, 2018

PCN Effective Date: September 26, 2018

Product(s) Affected: PE613050

Sample Availability: June 28, 2018

Change Control Board Approval #: CO-20650

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Change Category:☐ Wafer Fabrication Process☐ Design/Mask Change☐ Singulation Process☐ Assembly Process☒ Electrical Test: Test Program change☐ Manufacturing Site☐ Shipping/Labeling☐ Equipment☐ Material☒ Product Specification: Specification change☐ Product End of Life☐ Other**Purpose of Change:**

Ensure continuity of supply to PE613050 customer base.

Description of Change:

Product yield assessment of the PE613050 requires relaxation of the Peak Operating RF Voltage across two frequency ranges specified in the PE613050 Product Specification datasheet.

The 100 MHz – 1 GHz and 1 GHz – 3 GHz specification of 27 V_{PK} and 24 V_{PK}, respectively require relaxation to 18 V_{PK}.

The change detail is highlighted in Table 4. Operating Ranges of the PE613050 Product Specification datasheet.

There is no change to Form, Fit or Reliability. The ordering code will remain the same - PE613050A-Z/EK613050-01

For additional questions, please contact PCN@psemi.com

Product/Process Change (PCN) Notification

Original Peak Operating RF Voltage specifications

Table 4. Operating Ranges

Parameter	Min	Typ	Max	Unit
V _{DD} Supply Voltage	2.30	2.75	5.50	V
I _{DD} Power Supply Current (V _{DD} = 2.75V, +25 °C)		140	200	μA
V _{IH} Control Voltage High	1.2	1.5	3.1	V
V _{IL} Control Voltage Low	0	0	0.5	V
Control Input Current		1	10	μA
Peak Operating RF Voltage ^{1,2} 5–100 MHz 100 MHz–1 GHz 1 GHz–3 GHz			10 ⁵ 27 ³ 24 ⁴	V _{PK} V _{PK} V _{PK}
T _{OP} Operating Temperature Range	–40	+25	+85	°C

- Notes: 1. Between all RF ports, and from RF ports to GND.
2. Pulsed RF input duty cycle of 50% and 4620 μs, measured per 3GPP TS 45.005.
3. RF input power of 38.6 dBm, 50Ω.
4. RF input power of 37.6 dBm, 50Ω.
5. RF input power of 30.0 dBm, 50Ω.

New Peak Operating RF Voltage specifications

Table 4. Operating Ranges

Parameter	Min	Typ	Max	Unit
V _{DD} Supply Voltage	2.30	2.75	5.50	V
I _{DD} Power Supply Current (V _{DD} = 2.75V, +25 °C)		140	200	μA
V _{IH} Control Voltage High	1.2	1.5	3.1	V
V _{IL} Control Voltage Low	0	0	0.5	V
Control Input Current		1	10	μA
Peak Operating RF Voltage ^{1,2} 5–100 MHz 100 MHz–1 GHz 1 GHz–3 GHz			10 ⁵ 18 ³ 18 ⁴	V _{PK} V _{PK} V _{PK}
T _{OP} Operating Temperature Range	–40	+25	+85	°C

- Notes: 1. Between all RF ports, and from RF ports to GND.
2. Pulsed RF input duty cycle of 50% and 4620 μs, measured per 3GPP TS 45.005.
3. RF input power of 35.1 dBm, 50Ω.
4. RF input power of 35.1 dBm, 50Ω.
5. RF input power of 30.0 dBm, 50Ω.

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Qualification Summary:

N/A

Customer Acknowledgement of Receipt*:

☐ Change Denied <i>(Include explanation in comments section below)</i> ☐ Change Approved	Name:	
	Title:	
	Company:	
	Date:	
	Signature:	
Customer Comments:		