Central Semiconductor Corp.
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PCN #172
Notification Date:
21 May 2019

Product / Process Change Notice

Parts Affected:
Chip process CP688, P-Channel JFETs, wafers and bare die

Extent of Change:
The CP688 wafer process has been discontinued and replaced with the CP613V wafer process. See figures 1 and 2 for details.

Reason for Change:
The CP688 wafer process has been replaced by the CP613V wafer process in order to enhance the manufacturing process controls and performance. The wafer size has increased from 4 inch to 5 inch to improve throughput. In addition, this change is being made to ensure undisrupted supply of product, moving forward.

Effect of Change:
The wafer process meets all electrical specifications of the individual devices listed on the following page.

Qualification:

P/N: CP613V Chip Process Package: SOT-23

No.		Test	Conditions (Reference standards are in bold)	Qty	Pass/Fail	Test Results
1		**Device Life Tests**				
	a	**High Temperature Gate Bias (HTGB)**	T=125°C, t = 1000 hours 100%, VGS=30V, Source and Drain Shorted **JESD22-A108**	77	Pass	77/77
	b	**High Temperature Storage Life (HTSL)**	T=150°C, t = 1000 hours **JESD22-A103**	77	Pass	77/77
	C	**Thermal Shock**	100 cycles, dwell time = 5 min, -65°C to +150°C, max transfer time = 20 sec. **JESD22-A106**	77	Pass	77/77
	D	**Temperature Cycling (TC)**	-65°C -+150°C, Tdwell = 15min, 1000 cycles	77	Pass	77/77

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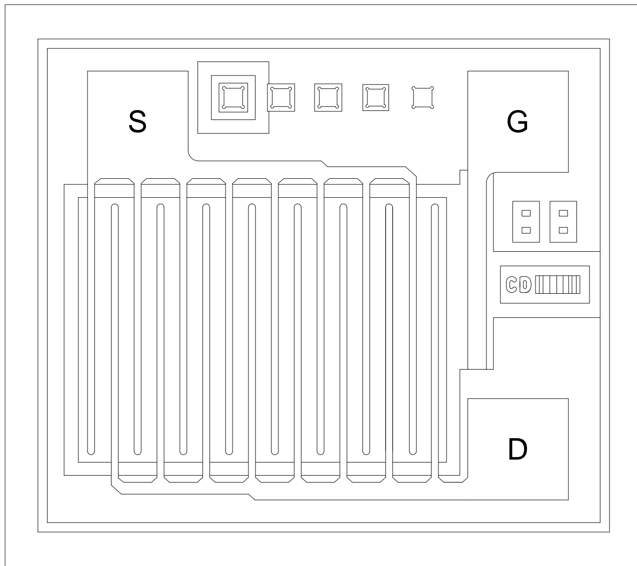
Effective Date of Change:
Existing Inventory of chip process CP688 will be shipped until depleted.

Sample Availability:
Please contact your salesperson or manufacturer's representative for samples.

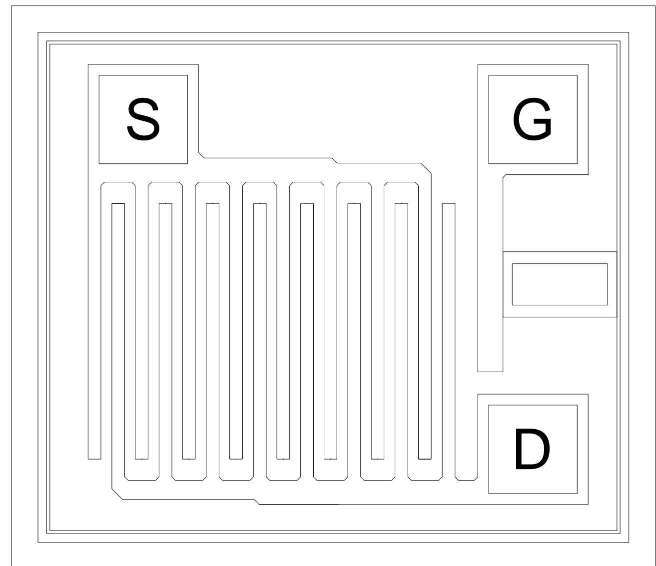
Figure 1: CP688 Chip Geometry (Discontinued)



BACKSIDE GATE

Wafer Diameter:	4 inch
Die Size:	24 x 21 mils
Die Thickness:	8.0 mils
Bond Pad Size (Gate):	3.0 x 3.0 mils
Bond Pad Size (Source):	3.0 x 3.0 mils
Bond Pad Size (Drain):	3.0 x 3.0 mils
Topside Metal:	Al-Si (17,000Å)
Backside Metal:	Au-As (13,000Å)

Figure 2: CP613V Chip Geometry



BACKSIDE GATE R0

Wafer Diameter:	5 inch
Die Size:	24 x 21 mils
Die Thickness:	7.1 mils
Bond Pad Size (Gate):	3.3 x 3.3 mils
Bond Pad Size (Source):	3.3 x 3.3 mils
Bond Pad Size (Drain):	3.3 x 3.3 mils
Topside Metal:	Al-Si (17000Å)
Backside Metal:	Au-As (10000Å)

Part Numbers Affected:

CMPFJ175	CP688-CMPFJ176-WN
CMPFJ176	

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As per JEDEC standard JESD46, Customer Notification of Product/Process Changes by Solid-State Suppliers, a lack of acknowledgement of a PCN within thirty (30) days constitutes acceptance of the change.

The undersigned acknowledges and accepts Central Semiconductor's Product/Process Change Notification (PCN).

Company Name:	
Address:	
Printed Name:	
Title:	
Signature:	
Date:	