**Product / Process Change Notice**

**Parts Affected:**

Chip process CP375, N-channel MOSFETs, wafers and bare die.

**Extent of Change:**

The CP375 wafer process has been discontinued and is being replaced with the CP406 wafer process. See Figures 1 and 2 for details.

**Reason for Change:**

The CP375 wafer process has been replaced in order to enhance manufacturing process controls and device performance. This change will help ensure an undisrupted supply of product.

**Effect of Change:**

The CP406 wafer process meets all electrical specifications of the individual devices listed on the following page.

**Qualification:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | P/N: | CP406 Chip Process |  | Package: | TO-220 |
|  |  |  |  |  |  |  |
| **No.** | | **Test** | **Conditions** (Reference standards are in bold) | **Qty** | **Pass/Fail** | **Test Results** |
| **1** | | **Device Life Tests** | | | | |
|  | A | **High Temperature Gate Bias (HTGB)** | T=150°C, t = 1000 hours 100% V\_GS  Negative Bias **JESD22-A108** | 77 | Pass | 77/77 |
|  | B | **High Temperature Gate Bias (HTGB)** | T=150°C, t = 1000 hours 100% V\_GS  Positive Bias **JESD22-A108** | 77 | Pass | 77/77 |
|  | C | **High Temperature Reverse Bias (HTRB)** | T=150°C, t = 1000 hours 100% V\_DS **JESD22-A108** | 77 | Pass | 77/77 |

**Effective Date of Change:**

Existing inventory of chip process CP375 will be shipped until depleted.

**Sample Availability:**

Please contact your salesperson or manufacturer’s representative for samples.

**Figure 1: CP375 Chip Geometry (Discontinued) Figure 2: CP406 Chip Geometry**



Wafer Diameter: 8 inch

Die Size: 62 x 38 mils

Die Thickness: 7.5 mils

Bond Pad Size (Gate): 13.7 x 18.8 mils

Bond Pad Size (Source): 55 x 30 mils

Topside Metal: Al (40,000Å)

Backside Metal: Ti/Ni/Ag (1,000Å/3,000Å/10,000Å)

Wafer Diameter: 8 inch

Die Size: 63.8 X 38.9 mils

Die Thickness: 5.5 mils

Bond Pad Size (Gate): 7.1 x 7.1 mils

Bond Pad Size (Source): 60.4 x 35.6 mils

Topside Metal: Al-Cu (40,000Å)

Backside Metal: Ti/Ni/Ag (1,000Å/3,000Å/10,000Å)

**Part Numbers Affected:**

|  |  |
| --- | --- |
| CWDM3011N | CP375-CWDM3011N-CT |
|  | CP375-CWDM3011N-WN |

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: |  |
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| Printed Name: |  |
| Title: |  |
| Signature: |  |
| Date: |  |