

## Product / Process Change Notice

**Parts Affected:**

Chip process CP214, NPN RF transistors, wafers, and die in chip form.

**Extent of Change:**

Die size and die pattern change.

The CP214 chip process currently measures 16 x 16 mils and is being replaced by the CP229 chip process which measures 21.7 x 21.7 mils.

**Reason for Change:**

An alternate wafer foundry was approved for RF transistor technology.

**Effect of Change:**

The CP229 meets all electrical parameters of the 2N5109 as per Central's data sheet with the exception of the max hFE limit. The hFE limit @ VCE=15V, Ic=50mA is being changed from 150 MAX to 210 MAX.

**Qualification:**

Standard evaluation and qualifications completed resulting in no electrical rejects.

**Effective Date of Change:**

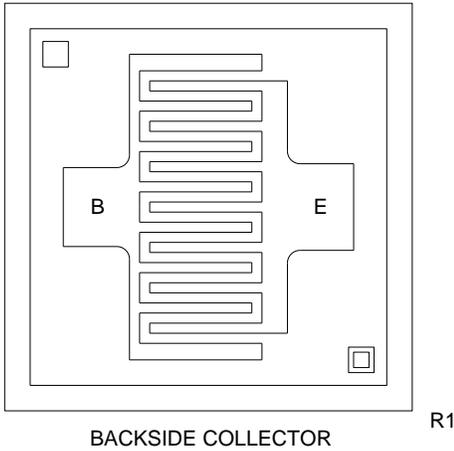
Existing inventory will be shipped until depleted.

**Sample Availability:**

Please contact Salesperson or Manufacturer's Representative.

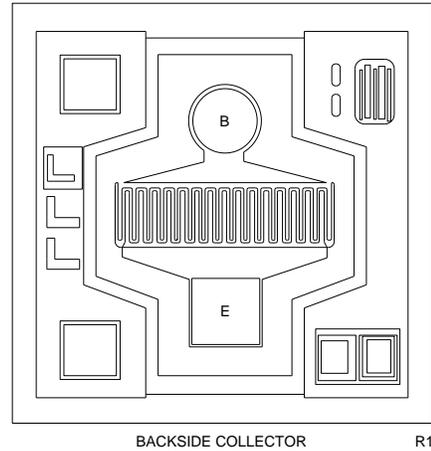
**Figures:**

**Figure 1: CP214 Chip Geometry**



Die Size:	16 x 16 mils
Die Thickness:	7.5 mils
Bond Pad Area (Emitter):	2.9 x 3.4 mils
Bond Pad Area (Base):	2.9 x 3.4 mils
Topside Metal:	Al (20,000Å)
Backside Metal:	Au (16,000Å)

**Figure 2: CP229 Chip Geometry**



Die Size:	21.7 x 21.7 mils
Die Thickness:	8.7 mils
Bond Pad Area (Emitter):	3.4 x 3.4 mils
Bond Pad Area (Base):	3.2 mils diameter
Topside Metal:	Al (10,000Å)
Backside Metal:	Au (10,000Å)

**Part Numbers Affected:**

CP214-2N5109-CT  
CP214-2N5109-WN  
2N5109