

## **Product / Process Change Notice**

**Parts Affected:**

Chip process CP117, NPN silicon, Darlington power transistors, wafers, and bare die.

**Extent of Change:**

The CP117 wafer process has been discontinued and replaced with the CP127 wafer process.

The overall wafer diameter is being reduced from 5 inch to 4 inch.

The die pattern has been changed; see figures 1 and 2 for details.

**Reason for Change:**

This process was transferred to an alternate wafer foundry due to low volume production.

**Effect of Change:**

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

**Qualification:**

Standard evaluation and qualifications completed resulting in no performance degradation.

**Effective Date of Change:**

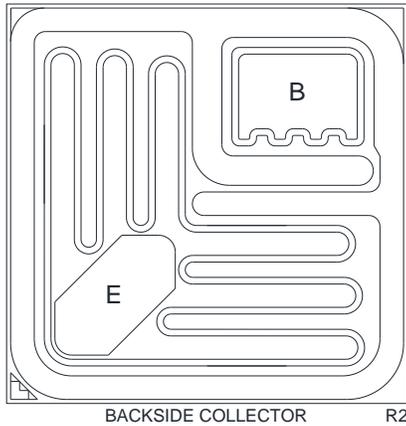
Existing inventory will be shipped until depleted.

**Sample Availability:**

Please contact Salesperson or Manufacturer's Representative.

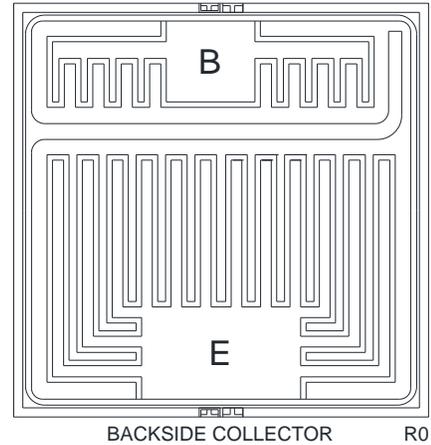
**Figures:**

**Figure 1: CP117 Chip Geometry (Discontinued)**



Wafer Diameter: 5 inch  
Die Size: 111 x 111 mils  
Die Thickness: 11 mils  
Bond Pad Size (Emitter): 20 x 26 mils  
Bond Pad Size (Base): 20 x 30 mils  
Topside Metal: Al (60,000Å)  
Backside Metal: Au/Cr/Ni/Au (6,100Å)

**Figure 2: CP127 Chip Geometry**



Wafer Diameter: 4 inch  
Die Size: 110 x 110 mils  
Die Thickness: 10.6 mils  
Bond Pad Size (Emitter): 24 x 42 mils  
Bond Pad Size (Base): 21 x 24 mils  
Topside Metal: Al (20,000Å)  
Backside Metal: Ag (10,000Å)

**Part Numbers Affected:**

2N6300
2N6301
2N6294
2N6295
CP117-TIP112-CT
CP117-TIP121-CT
CP117-TIP122-CT
CP117-2N6045-CT
CP117-2N6294-CT
CP117-2N6300-CT
CP117-2N6301-CT
CP117-2N6385-CT
CEN781
CEN1228