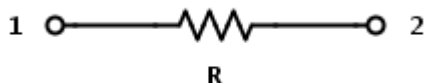


## Ceramic 0805 Flip Chip Resistor

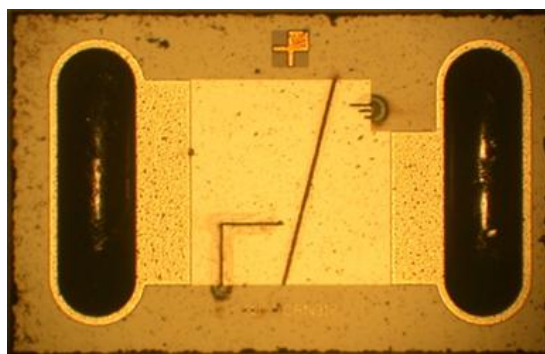
OnChip's FERN317 flip chip resistor offers a precise 1 channel resistor using advanced Thin Film manufacturing technology. The 0805 Flip Chip allows for direct placement of the resistor onto external circuitry by means of solder reflow. The package offers a 1.5mm pitch that is designed to mount according to IPC-7351 SMD and Land Pattern Standard. This device is RoHS compliant.

| Electrical Characteristics                    |                |
|---|----------------|
| Resistance Range                              | 10Ω – 500Ω     |
| Operating Temperature Range                   | -55°C to 150°C |
| Maximum Power Rating                          | 100mW          |
| Voltage                                       | 100V           |
| Noise, Maximum (MIL-STD-202, Method 308)      | -25dB          |
| Absolute Tolerance at 25°C (optional)         | ± 0.1%         |
| Temperature Coefficient of Resistance, ppm/°C | ± 25           |
| Typical Tracking TCR, ppm/°C                  | ± 5            |
| Power Dissipation @ 70°C                      | 1W             |

### Electrical Schematic



Resistor Schematic



FERN317 Flip Chip

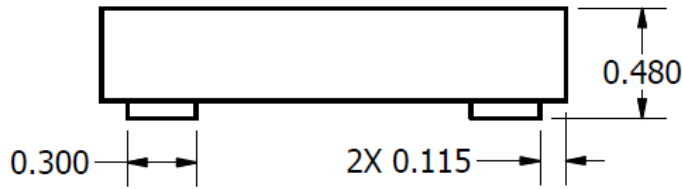
| Mechanical Characteristics |                  |
|----------------------------|------------------|
| Package Type               | 2 Lead FlipChip  |
| Substrate Material         | Ceramic          |
| Resistor Material          | Tantalum Nitride |
| Flammability               | UL94V-0          |
| Bump Material              | SnAgCu           |

### Ordering Information

| Part Number Designation |  |           |                        |
|-------------------------|--|-----------|------------------------|
| Series                  | Resistor Value   | Tolerance | TCR                    |
| FERN317-                | First 3 digits are significant value.<br>Last digit represents number of zeros.<br>(Ex: 1001 = 1kΩ), R indicates decimal point. (Ex: 10R0 = 10Ω) | C = ±0.1% | No Letter = ±250ppm/°C |
|                         |  | D = ±0.5% | H = ±100ppm/°C         |
|                         |  | F = ±1%   | A = ±50ppm/°C          |
|                         |  | G = ±2%   | B = ±25ppm/°C          |
|                         |  | J = ±5%   |                        |
|                         |  | K = ±10%  |                        |
|                         |  | M = ±20%  |                        |

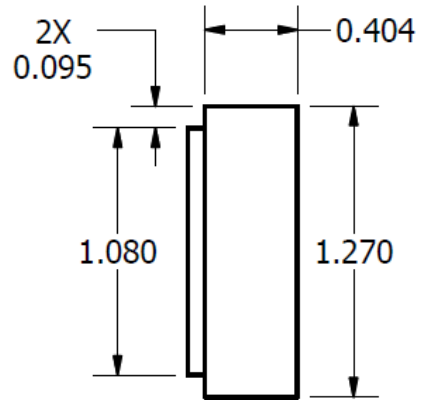
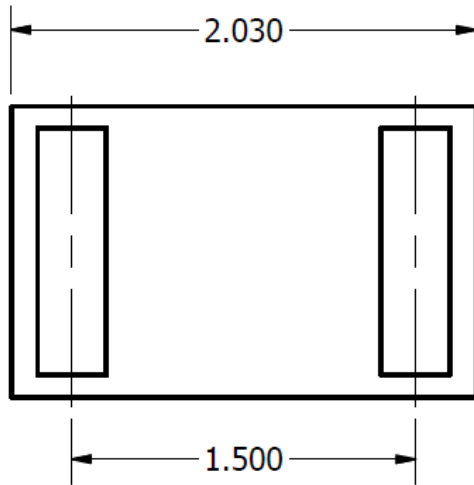
*Example Part Number:* FERN317-1002KH is a 10kΩ resistor with ±10% tolerance, and ±100ppm/°C TCR.

**Device Dimensions**



ALL DIMENSIONS IN MM

**SIDE VIEW**



**BOTTOM VIEW**

**RIGHT VIEW**