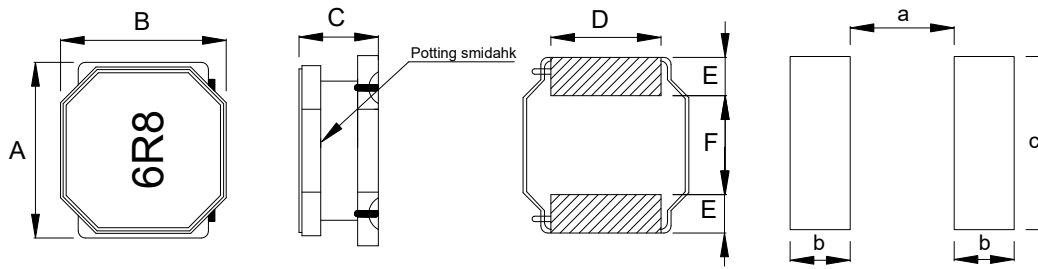


## 1. External Dimensions (Unit:m/m)



| Type   | A       | B       | C      | D      | E       | F      | a      | b       | c      | Q'TY/Reel |
|--------|---------|---------|--------|--------|---------|--------|--------|---------|--------|-----------|
| NR4030 | 4.0±0.2 | 4.0±0.2 | 3.0Max | 3.5Ref | 1.35Ref | 1.3Ref | 1.0Ref | 1.65Ref | 3.8Ref | 2000      |

## 2. Part Number Code

$\frac{ABG}{A}$      $\frac{4030}{B}$      $\frac{Y}{C}$      $\frac{6R8}{D}$      $\frac{A}{E}$

A: Series Name                      Power Inductors  
 B: Dimensions(mm)                4030: 4.0x4.0x3.0  
 C: Tolerance                         Y: +25%/-5%  
 D: Inductance                        6R8=6.8uH  
 E: Internal controls

## 3. Electrical Characteristics

| Part Number | Inductance (μH) | Test Frequency (KHz) | DC Resistance (mΩ)±30% | Heat Rating Current Irms (A) | Saturation Current Isat (A) |
|-------------|-----------------|----------------------|------------------------|------------------------------|-----------------------------|
| NR4030Y6R8A | 6.8             | 100KHz/1V            | 100.0                  | 1.65                         | 2.65                        |

Notes:

- 1) All test data is referenced to 25°C ambient.
- 2) Operating temperature range -40°C to +125°C.
- 3) Irms :DC current(A) that will cause an approximate  $\Delta T$  of 40°C.
- 4) Isat :DC current(A) that will cause  $I_o$  to drop approximately 35%.
- 5) The part temperature(ambient + temp rise)should not exceed 125°C under worst case operating conditions. Circuit design,component placement, PCB trace size and thickness,airflow and other cooling provisions all affect the part temperature,part temperature should be verified in the end application.