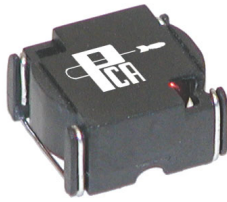


## EPI B20 Series

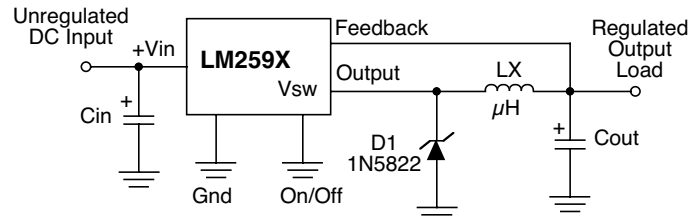


- Optimized for National's LM259X Series
- Low loss material ensures operation in high frequency switching converters, such as Buck, Boost or as output averaging filter inductor
- Also suitable for use in high quality filter applications
- 150 KHz & 500 KHz Switching Frequency
- Low Cost Inductor

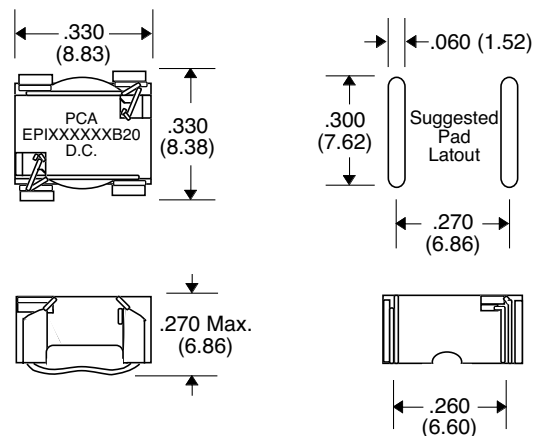
### Primary Specification

| Part Number  | National Semiconductor Chip | Induct. ( $\mu\text{H} \pm 20\%$ ) @ 0 Adc | DCR ( $\Omega$ Typ.) | Induct. ( $\mu\text{H} 15\%$ ) @ Idc | Idc (mA) | Core Loss @ Vt1 (mW) | Core Loss @ Vt2 (mW) | Vt1 (V- $\mu\text{Sec}$ ) 150 KHz | Vt2 (V- $\mu\text{Sec}$ ) 260 KHz | Temp.Rise @ Vt1 $^{\circ}\text{C}$ (Typ.) | Temp.Rise @ Vt2 $^{\circ}\text{C}$ (Typ.) |
|--------------|-----------------------------|--------------------------------------------|----------------------|--------------------------------------|----------|----------------------|----------------------|-----------------------------------|-----------------------------------|-------------------------------------------|-------------------------------------------|
| EPI1L0342B20 | ---                         | 1.05                                       | .011                 | 0.9                                  | 3400     | ---                  | 6.5                  | ---                               | 0.5                               | ---                                       | 54                                        |
| EPI4L7122B20 | ---                         | 5.2                                        | .051                 | 4.7                                  | 1200     | ---                  | 23.4                 | ---                               | 2.0                               | ---                                       | 40                                        |
| EPI6L8951B20 | ---                         | 7.5                                        | .061                 | 6.8                                  | 950      | ---                  | 23.4                 | ---                               | 2.4                               | ---                                       | 34                                        |
| EPI100801B20 | ---                         | 10.9                                       | .094                 | 10                                   | 800      | ---                  | 23.4                 | ---                               | 3.0                               | ---                                       | 35                                        |
| EPI150701B20 | ---                         | 16.8                                       | .148                 | 15                                   | 700      | ---                  | 23.4                 | ---                               | 3.6                               | ---                                       | 40                                        |
| EPI220601B20 | LM259X-L7                   | 25                                         | .224                 | 22                                   | 600      | 23.4                 | ---                  | 6.6                               | ---                               | 42                                        | ---                                       |
| EPI330441B20 | LM259X-L6                   | 36.5                                       | .343                 | 33                                   | 440      | 23.4                 | ---                  | 8.0                               | ---                               | 38                                        | ---                                       |
| EPI470371B20 | LM259X-L5                   | 51.6                                       | .408                 | 47                                   | 370      | 23.4                 | ---                  | 9.3                               | ---                               | 34                                        | ---                                       |
| EPI680321B20 | LM259X-L4                   | 75                                         | .625                 | 68                                   | 320      | 23.4                 | ---                  | 11.3                              | ---                               | 37                                        | ---                                       |
| EPI101261B20 | LM259X-L3                   | 110                                        | .958                 | 100                                  | 260      | 23.4                 | ---                  | 14                                | ---                               | 37                                        | ---                                       |
| EPI151211B20 | LM259X-L2                   | 166                                        | 1.476                | 150                                  | 210      | 23.4                 | ---                  | 17                                | ---                               | 37                                        | ---                                       |
| EPI221181B20 | LM259X-L1                   | 248                                        | 2.225                | 220                                  | 180      | 23.4                 | ---                  | 20.6                              | ---                               | 40                                        | ---                                       |

### Application



### Package B20



**Note:** Coplanarity within .005" Max.

Unless Otherwise Specified Dimensions are in Inches /mm  $\pm .010 / .25$