

## EPI AC3 Series



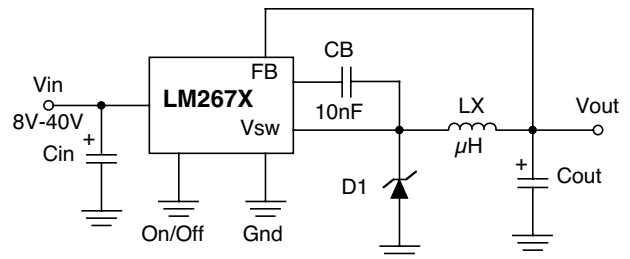
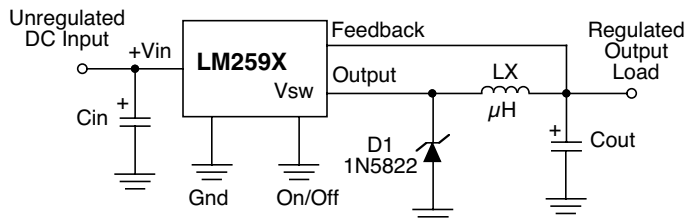
- Optimized for National's LM267X & LM259X Series
- Low loss material ensures operation in high frequency switching converters, such as Buck, Boost or as output averaging filter inductor
- Also suitable for use in high quality filter applications
- 150 KHz & 500 KHz Switching Frequency
- Low Cost Inductor

### Primary Specification

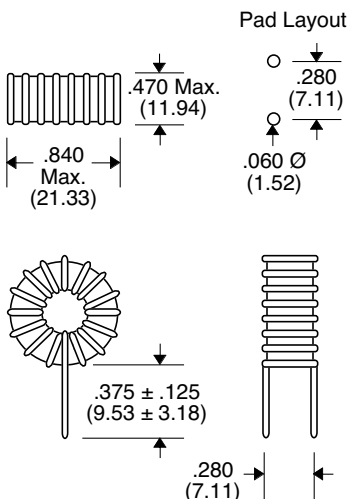
| Part Number  | National Semiconductor Chip | Induct. ( $\mu\text{H} \pm 20\%$ ) @ 0 Adc | DCR ( $\Omega$ Typ.) | Induct. ( $\mu\text{H} 15\%$ ) @ Idc | Idc (mA) | Core Loss @ Vt1 (mW) | Core Loss @ Vt2 (mW) | Vt1 (V- $\mu\text{Sec}$ ) 150 KHz | Vt2 (V- $\mu\text{Sec}$ ) 260 KHz | Temp.Rise @ Vt1 $^{\circ}\text{C}$ (Typ.) | Temp.Rise @ Vt2 $^{\circ}\text{C}$ (Typ.) |
|--------------|-----------------------------|--------------------------------------------|----------------------|--------------------------------------|----------|----------------------|----------------------|-----------------------------------|-----------------------------------|-------------------------------------------|-------------------------------------------|
| EPI220502AC3 | LM267X-L41                  | 27                                         | 0.025                | 22                                   | 5000     | ---                  | 290                  | ---                               | 23.1                              | ---                                       | 35                                        |
|              | LM267X-L50                  | 27                                         | 0.025                | 22                                   | 5000     | ---                  | 290                  | ---                               | 23.1                              | ---                                       | 35                                        |
| EPI330402AC3 | LM267X-L40                  | 40                                         | 0.038                | 33                                   | 4000     | ---                  | 260                  | ---                               | 27.0                              | ---                                       | 34                                        |
| EPI330352AC3 | LM259X-L40                  | 38                                         | 0.046                | 33                                   | 3500     | 210                  | ---                  | 33.4                              | ---                               | 31                                        | ---                                       |
| EPI470352AC3 | LM259X-L39                  | 60                                         | 0.074                | 47                                   | 3500     | 185                  | ---                  | 40.0                              | ---                               | 42                                        | ---                                       |
|              | LM267X-L39                  | 60                                         | 0.074                | 47                                   | 3500     | ---                  | 185                  | ---                               | 28.5                              | ---                                       | 42                                        |
| EPI680302AC3 | LM259X-L38                  | 87                                         | 0.090                | 68                                   | 3000     | 155                  | ---                  | 46.7                              | ---                               | 37                                        | ---                                       |
|              | LM267X-L38                  | 87                                         | 0.090                | 68                                   | 3000     | ---                  | 155                  | ---                               | 30.8                              | ---                                       | 37                                        |
| EPI680352AC3 | LM267X-L44                  | 91                                         | 0.091                | 68                                   | 3500     | 45                   | ---                  | 26.7                              | ---                               | 43                                        | ---                                       |
|              | LM259X-L44                  | 91                                         | 0.091                | 68                                   | 3500     | ---                  | 60                   | ---                               | 12.7                              | ---                                       | 44                                        |
| EPI101252AC3 | LM259X-L37                  | 128                                        | 0.110                | 100                                  | 2500     | 155                  | ---                  | 55.4                              | ---                               | 33                                        | ---                                       |
| EPI151202AC3 | LM259X-L36                  | 194                                        | 0.260                | 150                                  | 2000     | 113                  | ---                  | 56.7                              | ---                               | 43                                        | ---                                       |
| EPI221152AC3 | LM259X-L35                  | 265                                        | 0.394                | 220                                  | 1500     | 134                  | ---                  | 73.4                              | ---                               | 39                                        | ---                                       |

For no header version : add "V" for Vertical Mount and add "H" for Horizontal Mount

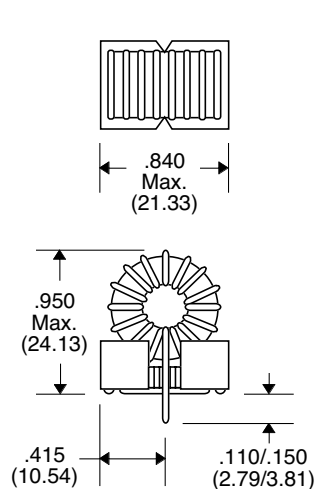
### Applications



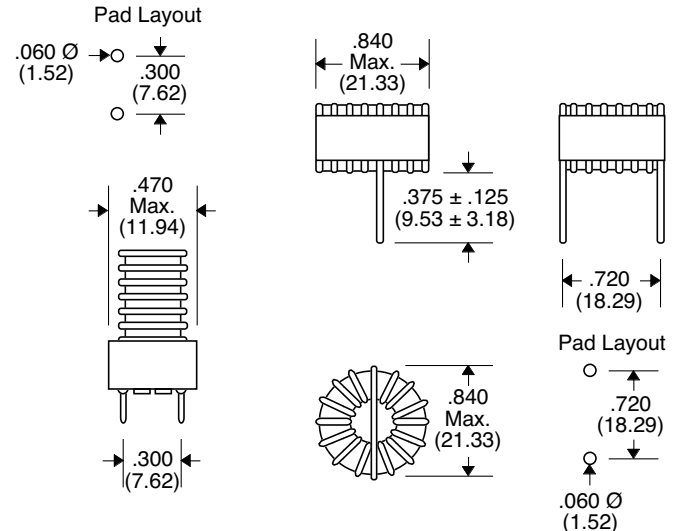
### Package AC3V



### Package AC3



### Package AC3H



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