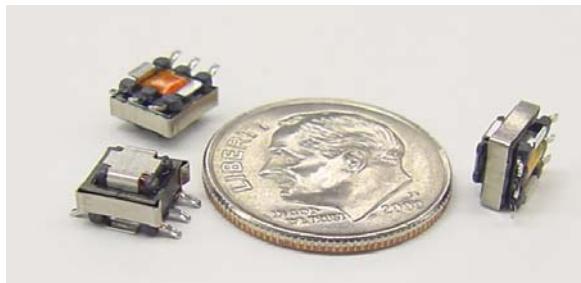




## SMD Current Sense Transformer CT319 Series

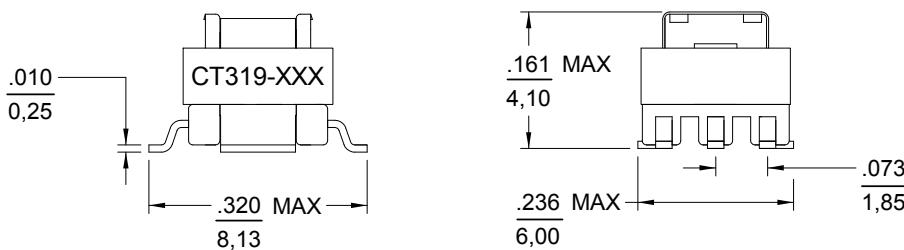
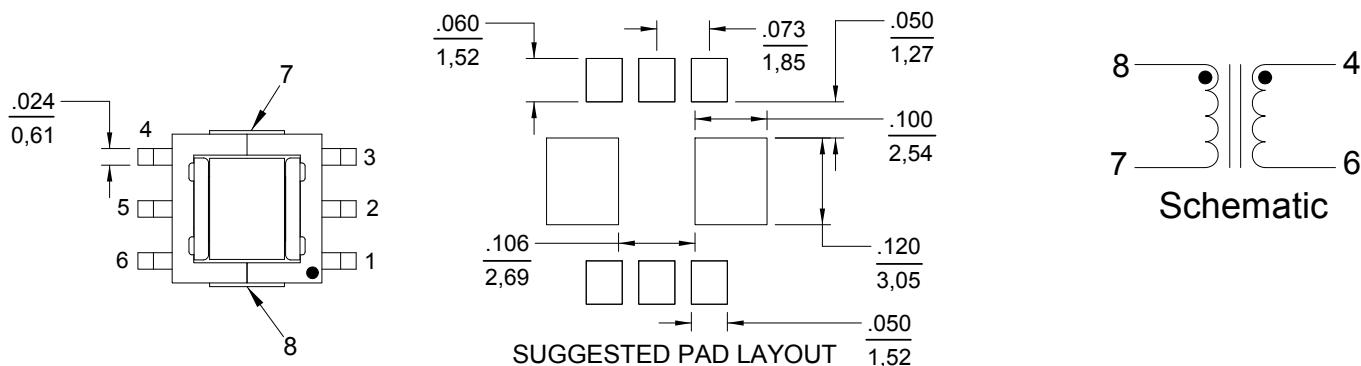


### Features

- Low Profile – Height: 4.1mm Max.
- Primary Rated for 20 Amps RMS Max. (note 8)
- Operating Frequency Range: 10kHz to 1MHz
- Temperature range -40°C to +130°C
- Electrical Specifications @ 25°C
- Tinned Leads with Leaded Solder is Available (note 6)

| Datronics Part Number | Turns Ratio<br>(± 2%) | Inductance (4-6) $\mu$ H<br>(TYP) | DCR (4-6) $\Omega$<br>(MAX) | Hipot Vrms |
|-----------------------|-----------------------|-----------------------------------|-----------------------------|------------|
| CT319-020             | 1:20                  | 100                               | 0.50                        | 500        |
| CT319-030             | 1:30                  | 230                               | 0.75                        | 500        |
| CT319-040             | 1:40                  | 440                               | 1.03                        | 500        |
| CT319-050             | 1:50                  | 670                               | 1.61                        | 500        |
| CT319-060             | 1:60                  | 1000                              | 1.98                        | 500        |
| CT319-070             | 1:70                  | 1300                              | 2.97                        | 500        |
| CT319-100             | 1:100                 | 2800                              | 5.36                        | 500        |
| CT319-125             | 1:125                 | 4400                              | 6.67                        | 500        |
| CT319-200             | 1:200                 | 12200                             | 33.24                       | 500        |

### Mechanical Outline:



### Notes:

- 1.) All dimensions are in inches/mm  
Tolerance: ±0.010/0.25 unless otherwise specified
- 2.) Inductance tested at 10 kHz, 0.1Vrms
- 3.) Coplanarity: 0.004/0.102
- 4.) Tape and reel quantity, 1200 pcs/reel
- 5.) Terminating resistor ( $R_T$ ) calculated:  
$$R_T = (N_{\text{TURN}} / I_{\text{PRI}}) * V_{\text{REF}}$$
- 6.) For Non-RoHS parts, replace CT prefix with -42  
e.g. CT319 becomes 42-319
- 7.) Terminal finish compliant to RoHS requirements.  
Solder in accordance with J-STD-020D
- 8.) Primary DCR (~4mΩ) may cause higher voltage than typical for current sensing at high current and higher turns ratios.