

SX-01 SMD Current Sense Transformers

Features

- Small footprint and low profile SMT component
- Frequency range from 50kHz to 500kHz
- Primary current rating up to 15 Amps
- Two primary wire for series or parallel configuration
- Operating temperature: -40°C to 125°C
- Primary to secondary isolation: 700 V_{RMS}



| Part Number | Turns ratio | Current rating (A) | Secondary Rdc | Secondary Inductance | Burden Resistor |
|--------------|-------------|-----------------------|---------------|----------------------|-----------------|
| | | | (mΩ) MAX | (mH) MIN | (Ω) |
| SX-01-100050 | 1:1:50 | 15 | 380 | 4.6 | 25 |
| SX-01-100100 | 1:1:100 | 15 | 930 | 18.5 | 50 |
| SX-01-100200 | 1:1:200 | 15 | 3900 | 65 | 100 |

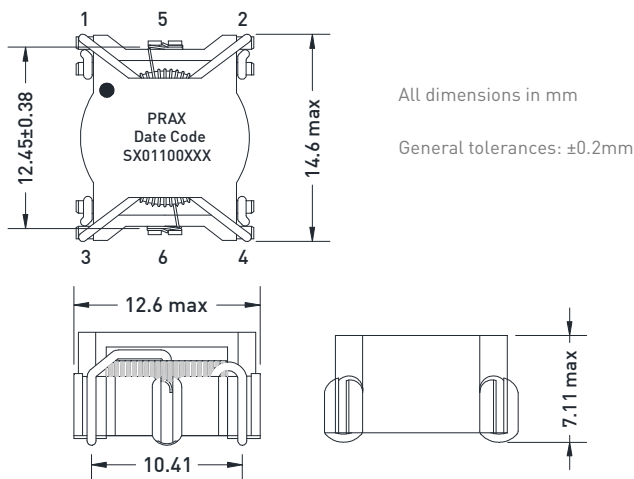
Notes

- 1- Electrical specifications at 25°C
- 2- Current rating based on 40°C temperature rise. Primary windings in parallel
- 3- Operating temperature includes component self-heating
- 4- Inductance measured at 100kHz, 20mVac. SX01100200 at 10kHz, 60mVac
- 5- Recommended burden resistor for 15Amps. Primary windings in parallel

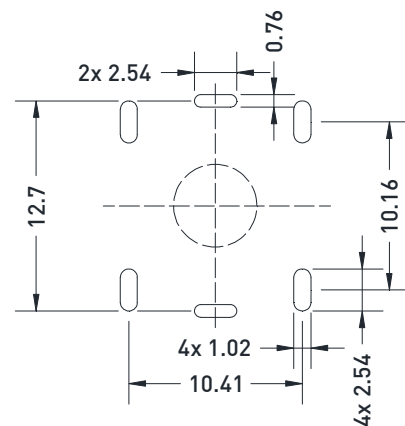
To calculate burden resistor use following formula:

$$R_b (\Omega) = \frac{V_{out} \cdot N}{I_{peak_primary}}$$

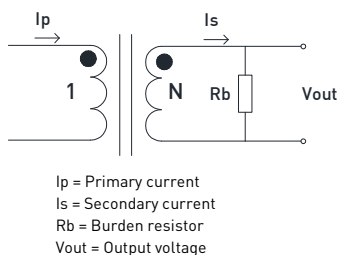
Dimensions



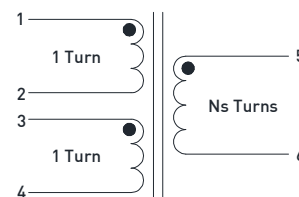
Recommended pad layout



Application circuit



Schematic



Revised: 05/09/2012

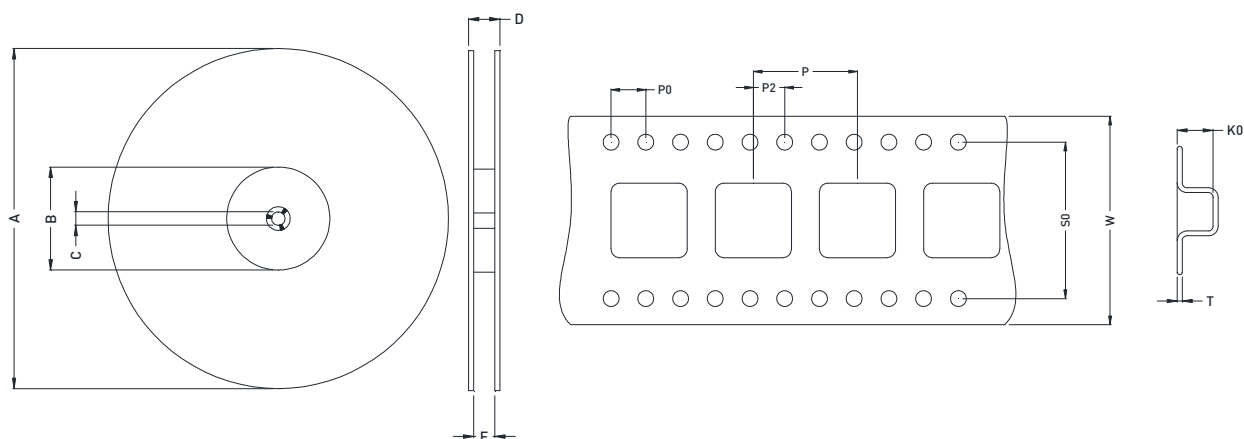
Specifications subject to change without notice

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Packaging information

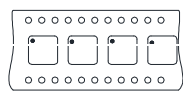
| | |
|---------------|------------------------|
| Delivery form | Tape & reel |
| | 13" size |
| | 425 pcs/reel |
| | According EIA 481 Std. |

Tape & reel specifications



| Reel dimensions (mm) | | | | |
|----------------------|-----|----|------|------|
| A | B | C | D | E |
| 330 | 100 | 13 | 38.4 | 32.4 |

| Tape dimensions (mm) | | | | | | |
|----------------------|----|----|----|------|-----|-----|
| W | P | P0 | P2 | S0 | K0 | T |
| 32 | 20 | 4 | 2 | 28.4 | 7.4 | 0.4 |

| Orientation |
|---|
|  |

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