**HCTSM110103HAL HCT Transformer**

### Features
- Toroid core for high coupling and low radiation
- Complies with IEC/UL 60664-1 and IEC/UL 62368-1
- Reinforced insulation for working voltage up to 1200 VDC
- Hi-Pot: 5000 VAC
- Fully sealed and compact size
- Designed for isolation power supplies using TI SN6501 and SN6505B
- Partial discharge test based on IEC 60664-1: 2000 V
- AEC-Q200 compliant
- RoHS compliant*

### General Specifications
- OCL (100 kHz / 1 V) with Pin 2 and Pin 3 tied: 80 µH min.
- Leakage Inductance (100 kHz / 0.1 V): 6.0 µH max.
- DCR: NP1: 0.18 Ω max., NP2: 0.18 Ω max., NS1: 0.80 Ω max., NS2: 0.80 Ω max.
- Turns Ratio (NS:NP): 3.0 ± 3%
- Hi-pot (1 mA, 60 S): 5000 VAC
- Operating Temperature: -40 °C to +125 °C (Temperature rise included)
- Storage Temperature (Component): -40 °C to +125 °C
- Clearance/Creepage Distance of Primary to Secondary: 11 mm min.
- Partial discharge test based on IEC 60664-1: 2000 V
- Moisture Sensitivity Level: 1
- ESD Classification (HBM): N/A

### Packaging Specifications
- Tape & Reel: 200 pcs./13-inch reel

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### How To Order
**HCTSM110103HAL E**
- Model
- AEC-Q200 Compliancy Designator
- RoHS Compliancy Designator
- Packaging: E = 200 pcs. per 13-inch Reel

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### Additional Information
Click these links for more information:
- Product
- Technical Library
- Inventory
- Samples
- Contact

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**WARNING** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

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HCTSM110103HAL HCT Transformer

Reflow Solder Profile

Profile Feature | Pb-Free Assembly
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Average Ramp-Up Rate | 3 °C / second max.
PREHEAT:
- Temperature Min. ($T_{s\text{min}}$)
- Temperature Max. ($T_{s\text{max}}$)
- Time ($T_{s\text{min}}$ to $T_{s\text{max}}$) | 150 °C
- 200 °C
- 60–180 seconds
Liquidus Temperature ($T_L$) | 217 °C
Time Above Liquidus Temperature ($t_L$) | 60–150 seconds
Peak Temperature ($T_P$) | 245-250 °C
Time within 5 °C of Actual Peak Temperature ($t_p$) | 20–40 seconds
Ramp-Down Rate from Peak Temperature | 6 °C / second max.
Time 25 °C to Peak Temperature ($T_p$) | 8 minutes max.
Do Not Exceed | 250 °C

Packaging Specifications

Specifications and tolerances comply with EIA-481 requirements.

Dimensions: (MM) (INCHES)

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