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*

HCTSM110103HAL HCT Transformer

Additional Information

Click these links for more information:

PRODUCT | TECHNICAL LIBRARY | INVENTORY | SAMPLES | CONTACT

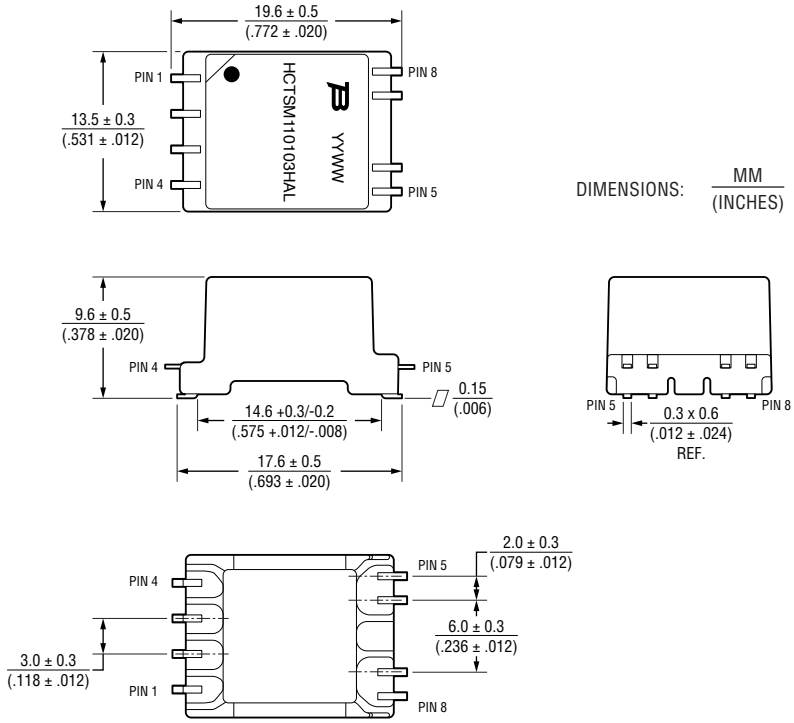
General Specifications

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

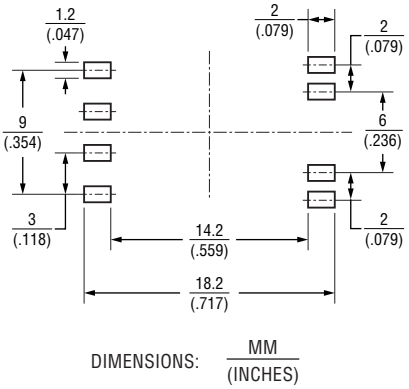
Packaging Specifications

Tape & Reel..... 200 pcs./13-inch reel

Product Dimensions



Recommended Layout

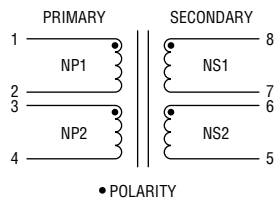


How To Order

HCTSM110103H A L - E

Model
AEC-Q200 Compliancy Designator
RoHS Compliancy Designator
Packaging
E = 200 pcs. per 13-inch Reel

Electrical Schematic



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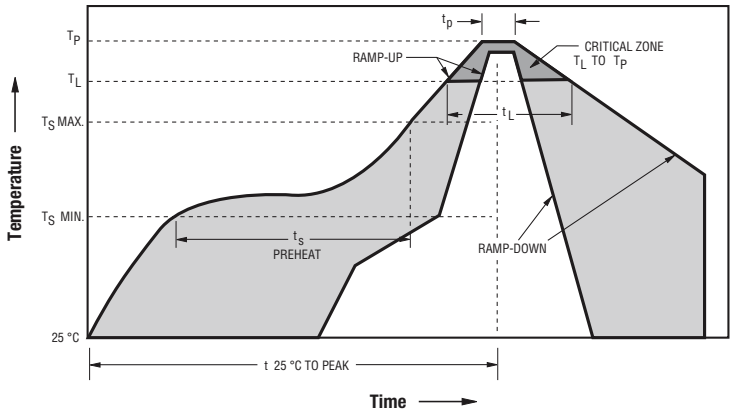
WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

*RoHS Directive 2015/863, Mar 31, 2015 and Annex.
Specifications are subject to change without notice.
Users should verify actual device performance in their specific applications.

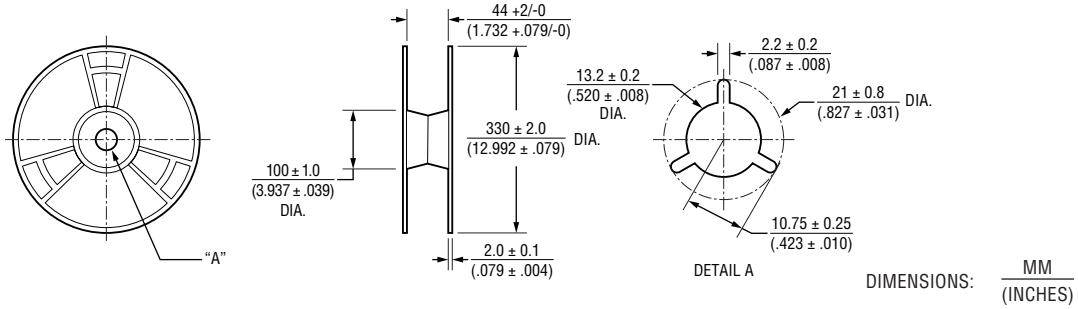
Reflow Solder Profile

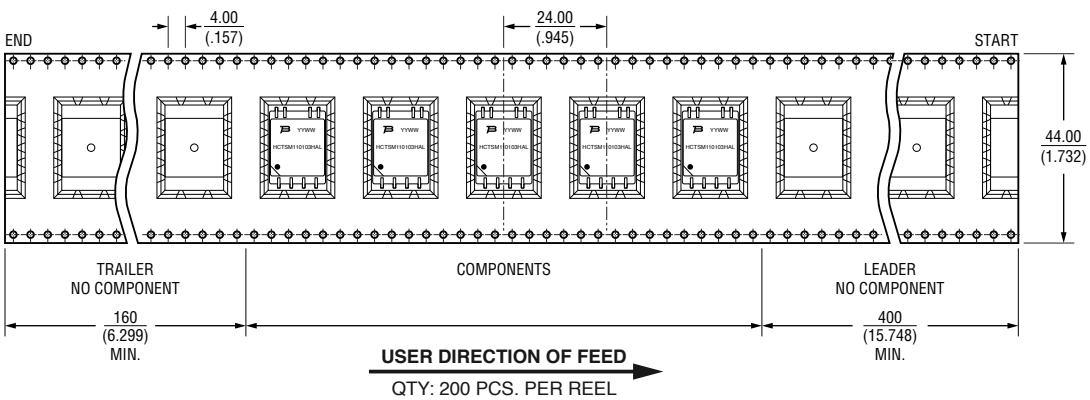


Profile Feature	Pb-Free Assembly
Average Ramp-Up Rate	3 °C / second max.
PREHEAT: Temperature Min. (T_{smin}) Temperature Max. (T_{smax}) Time (T_{smin} to T_{smax})	 150 °C 200 °C 60~180 seconds
Liquidus Temperature (T_L)	217 °C
Time Above Liquidus Temperature (t_L)	60~150 seconds
Peak Temperature (T_p)	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.





REV. 06/23

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