



Features

- Toroid core for high coupling and low radiation
- Complies with IEC 60950-1 and IEC 62368-1
- Reinforced insulation for working voltage up to 1000 V
- Hi-Pot: 4200 VAC
- Designed for isolation power supplies using TI SN6501 and SN6505B
- RoHS compliant*

HCTSM100304FL High Clearance and Creepage Distance Transformer

Additional Information

Click these links for more information:



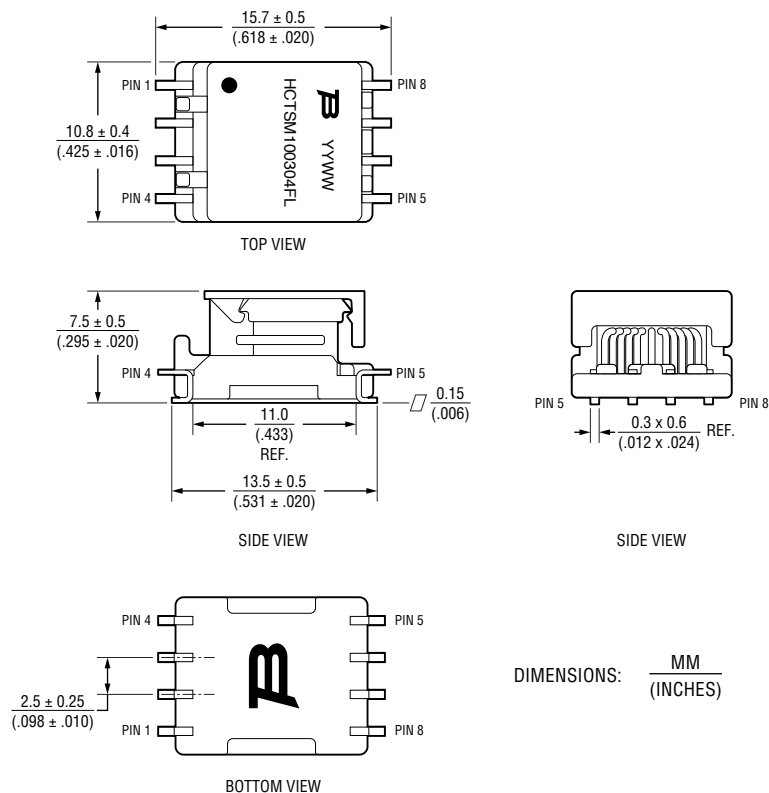
General Specifications

OCL (100 kHz / 1 V)
1-4 with Pin 2,3 shorted
..... 400 μ H min. (700 μ H typ.)
Leakage Inductance (100 kHz / 0.1 V)
1-4 with Pin 2,3 shorted and
Pin 5,6,7,8 shorted 2.0 μ H max.
DCR
NP1 0.50 Ω max.
NP2 0.50 Ω max.
NS1 0.50 Ω max.
NS2 0.50 Ω max.
Turns Ratio (NS:NP) 1.333 $\pm$ 3 %
Volt Second Product 11 VuS typ.
Hi-pot (5 mA, 60 S) 4200 VAC
Working Voltage up to 1000 V
Operating Temperature
..... -40 $^{\circ}$ C to +125 $^{\circ}$ C
(Temperature rise included)
Storage Temperature (Component)
..... -40 $^{\circ}$ C to +125 $^{\circ}$ C
Clearance/Creepage Distance of
Primary to Secondary 10 mm min.
Level of Insulation
..... Reinforced for the working voltage
of 1000 V, Overvoltage Category II,
Pollution Degree 2, Altitude 2000 m
Moisture Sensitivity Level 1
ESD Classification (HBM) N/A

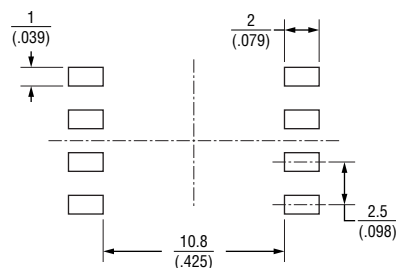
Packaging Specifications

Tape & Reel 400 pcs./13-inch reel

Product Dimensions



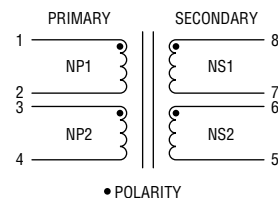
Recommended Layout



How To Order

HCTSM100304F L - E
Model _____
RoHS Compliancy Designator _____
Packaging _____
E = 400 pcs. per 13-inch Reel,
5 Reels per Box

Electrical Schematic



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.

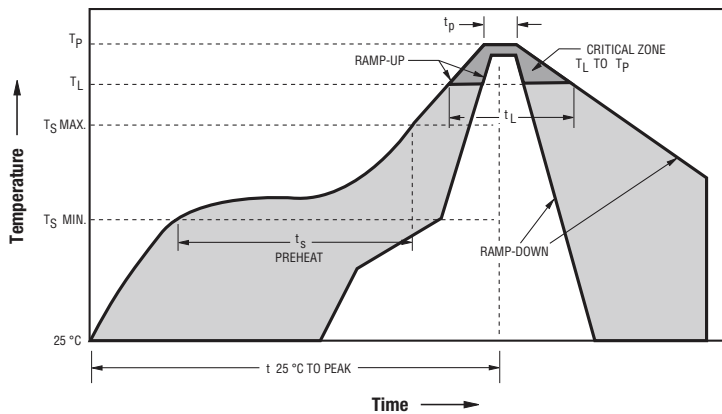
Users should verify actual device performance in their specific applications.

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HCTSM100304FL High Clearance and Creepage Distance Transformer

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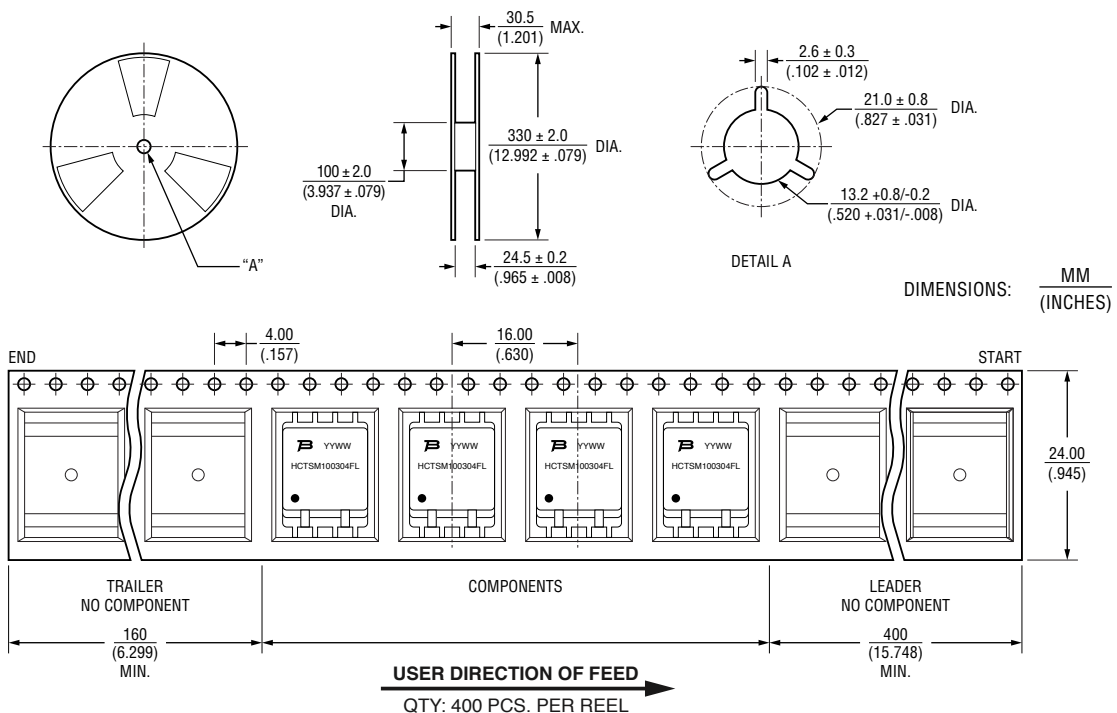
Reflow Solder Profile



Profile Feature	Pb-Free Assembly
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	260 °C

Packaging Specifications

Specifications and tolerances comply with EIA-481 requirements.



REV. 05/22

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