

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)
 -25 $^{\circ}$ C to +85 $^{\circ}$ 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

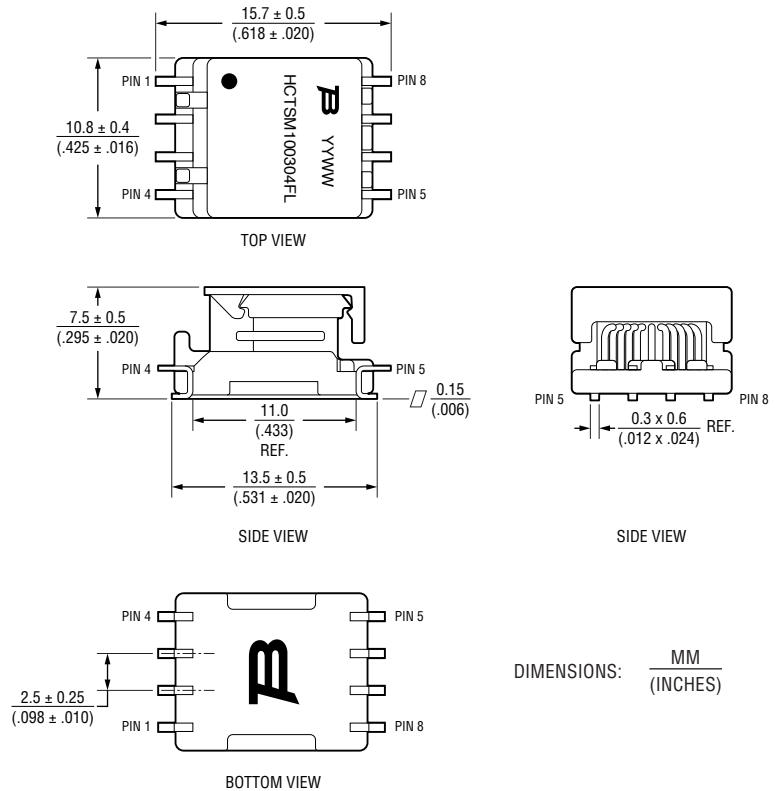
Moisture Sensitivity Level 1

ESD Classification (HBM) N/A

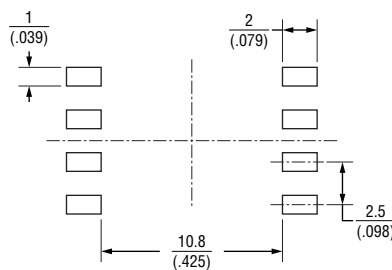
Packaging Specifications

Tape & Reel 400 pcs./13-inch reel

Product Dimensions



Recommended Layout



How To Order

HCTSM100304FL - E

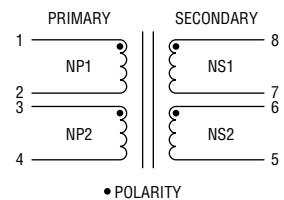
Model _____

RoHS Compliancy Designator _____

Packaging _____

E = 400 pcs. per 13-inch Reel,
 5 Reels per Box

Electrical Schematic



CALIFORNIA WARNING: Can expose you to lead, a carcinogen and reproductive toxicant.
 See www.P65Warnings.ca.gov

*RoHS Directive 2015/863, Mar 31, 2015 and Annex.
 Specifications are subject to change without notice.

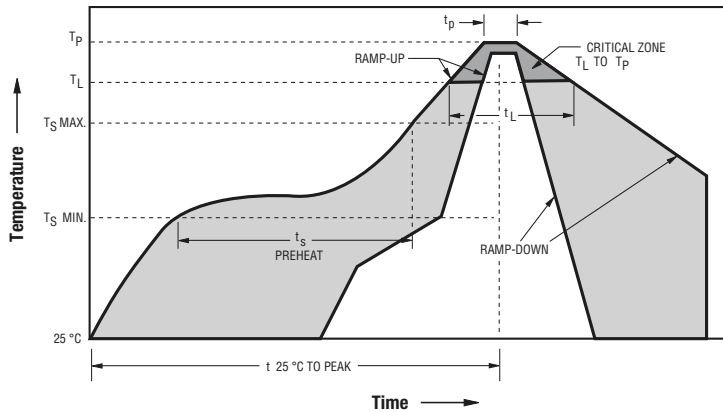
Users should verify actual device performance in their specific applications.

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HCTSM100304FL High Clearance and Creepage Distance Transformer



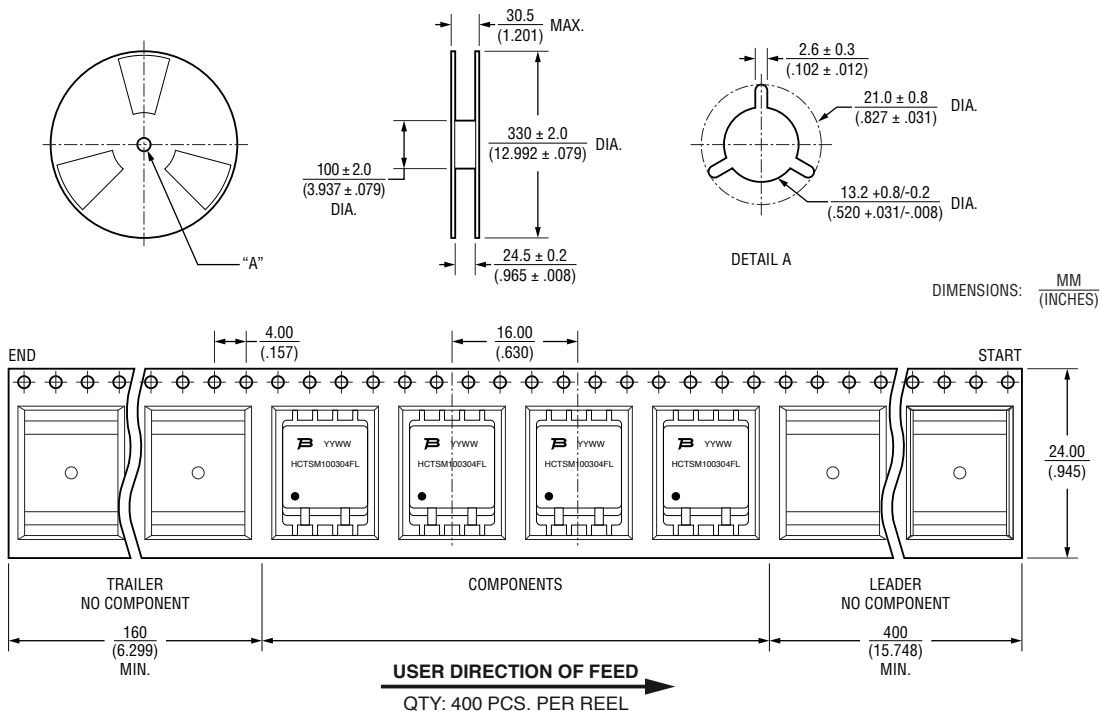
Reflow Solder Profile



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. 08/25

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