

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 1500 VDC, Material Group I
- Hi-Pot: 7640 VDC
- Designed for isolation power supplies using TI SN6501 and SN6505B
- UL recognized per UL 62368-1, File No. E515965
- Partial discharge level up to 2250 V (Ut = 1800 V)
- RoHS compliant*

HCTSM150102HL High Clearance and Creepage Distance Transformer

Additional Information

Click these links for more information:

PRODUCT | TECHNICAL LIBRARY | INVENTORY | SAMPLES | CONTACT

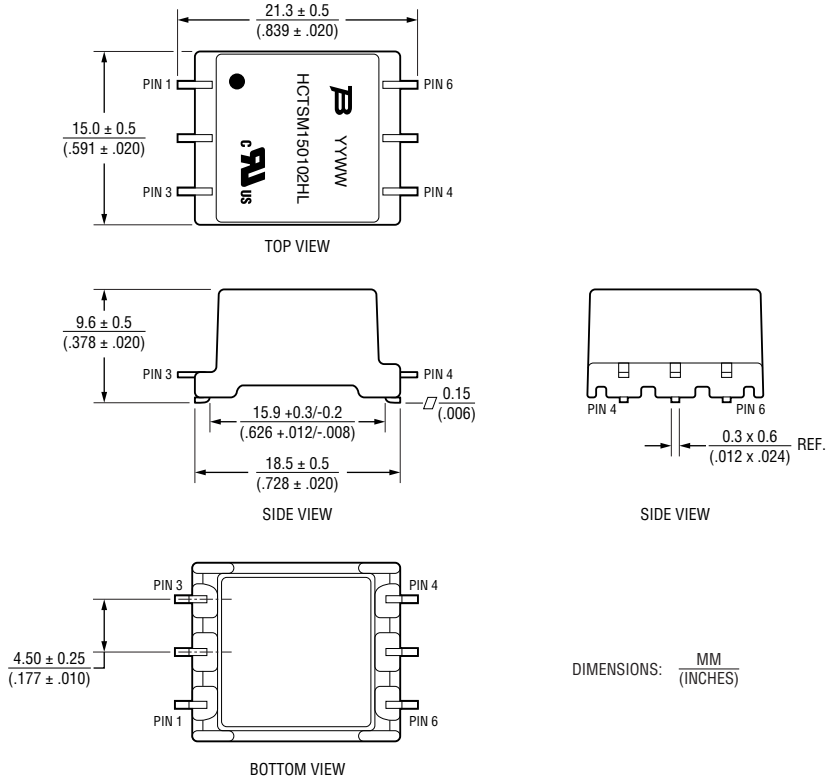
General Specifications

OCL (100 kHz / 1 V)..... 80 µH min.
Leakage Inductance (100 kHz/0.1 V)
..... 4.0 µH max.
DCR
Pin (1-3) ..... 0.20 Ω max.
Pin (6-4) ..... 0.35 Ω max.
Turns Ratio (Pin (6-4) : Pin (1-3))
.....2.0 ± 3 %
Rated Current (Parallel input).....1 A
Volt Second Product..... 25 VuS typ.
Partial Discharge Test
based on IEC 60664-1
.....2250 Vrms (Ut = 1800 Vrms)
Hi-pot (1 mA, 2 S)..... 7640 VDC
Working Voltage ..... up to 1500 VDC
Operating Temperature
.....-40 °C to +125 °C
(Temperature rise included)
Storage Temperature (Component)
..... -25 °C to +85 °C
Clearance/Creepage Distance of
Primary to Secondary.....15 mm min.
Level of Insulation
..... Reinforced for a working voltage of 1500 VDC, Material Group I, Overvoltage Category II, Pollution Degree 2, Altitude 2000 m
Moisture Sensitivity Level.....1
ESD Classification (HBM)..... N/A

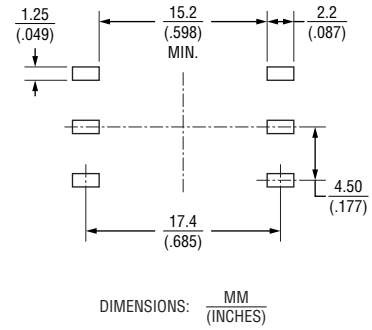
Packaging Specifications

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

Product Dimensions



Recommended Layout

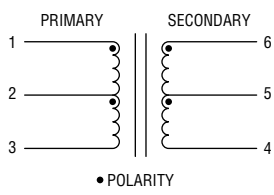


How To Order

HCTSM150102H L - E

Model
RoHS Compliancy Designator
Packaging
E = 200 pcs. per 13-inch Reel, 3 Reels per Box

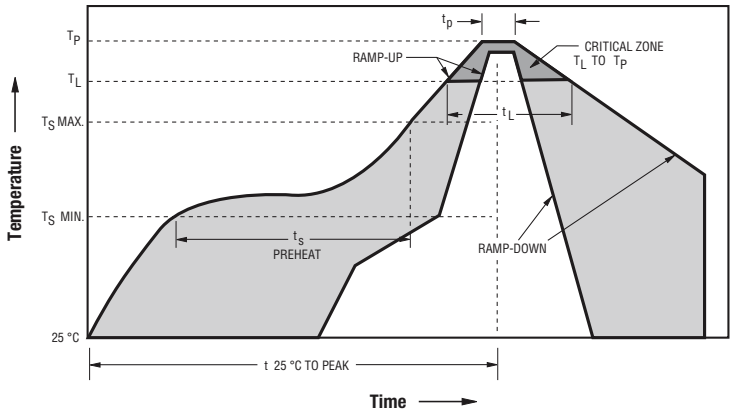
Electrical Schematic



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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Reflow Solder Profile

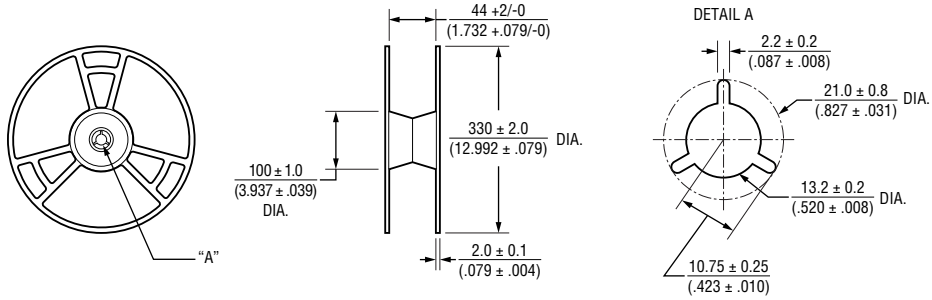


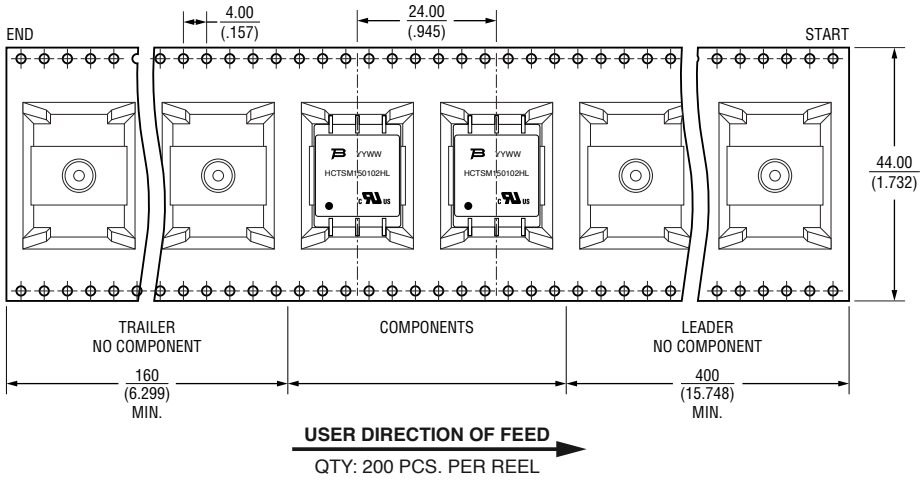
Profile Feature	Pb-Free Assembly
Average Ramp-Up Rate	3 °C / second max.
PREHEAT: Temperature Min. (T_{smin}) Temperature Max. (T_{smax}) Time (T_{smin} to T_{smax})	 150 °C 200 °C 60~180 seconds
Liquidus Temperature (T_L)	217 °C
Time Above Liquidus Temperature (t_L)	60~150 seconds
Peak Temperature (T_p)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

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Packaging Specifications

Specifications and tolerances comply with EIA-481 requirements.





DIMENSIONS: MM (INCHES)

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