



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](https://www.ul.com/recognized-listings/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:



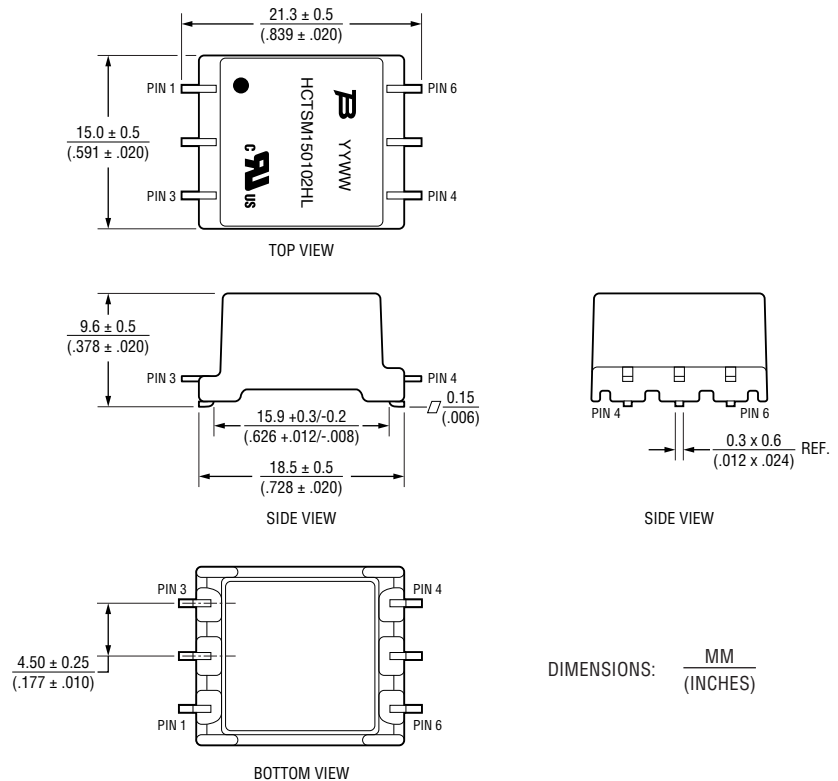
General Specifications

OCL (100 kHz / 1 V)..... 80 μ H min.
 Leakage Inductance (100 kHz/0.1 V)
 4.0 μ H 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 \pm 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 $^{\circ}$ 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..... 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

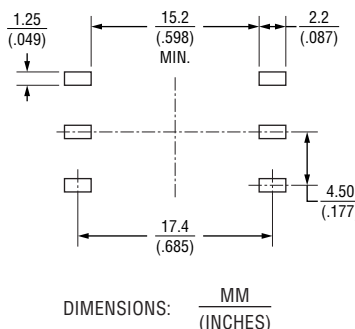
Packaging Specifications

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

Product Dimensions



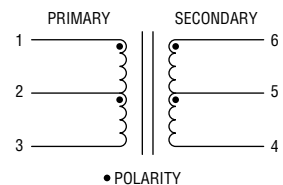
Recommended Layout



How To Order

HCTSM150102H L - E
 Model _____
 RoHS Compliancy Designator _____
 Packaging _____
 E = 200 pcs. per 13-inch Reel,
 3 Reels per Box

Electrical Schematic



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

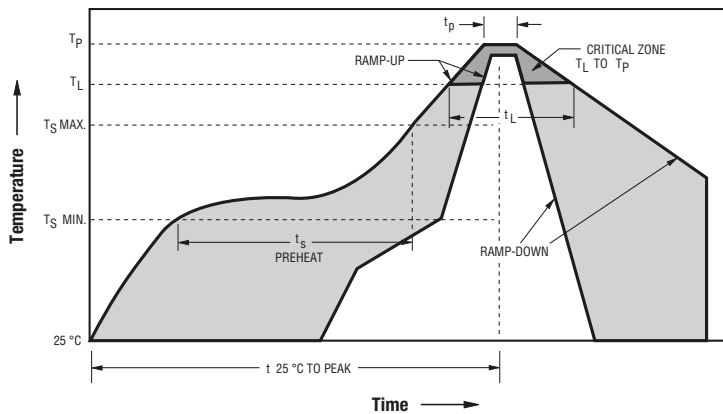
* RoHS Directive 2015/863, Mar 31, 2015 and Annex.

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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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	260 °C

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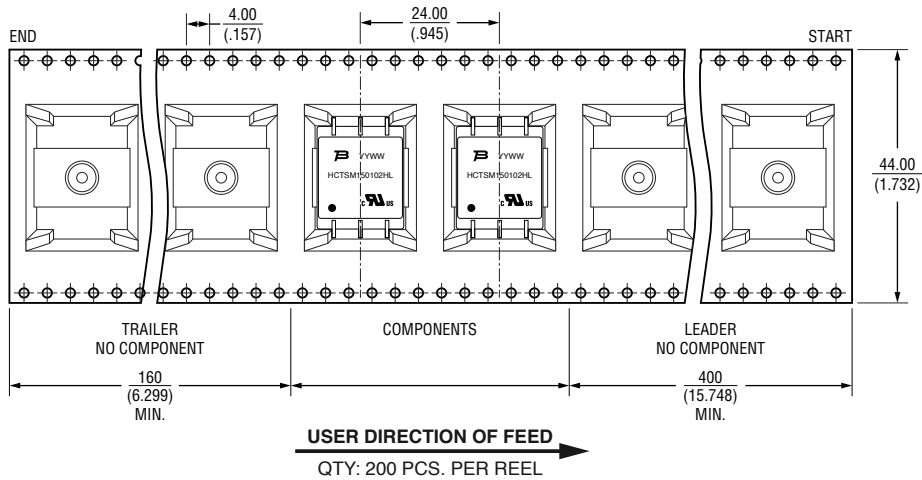
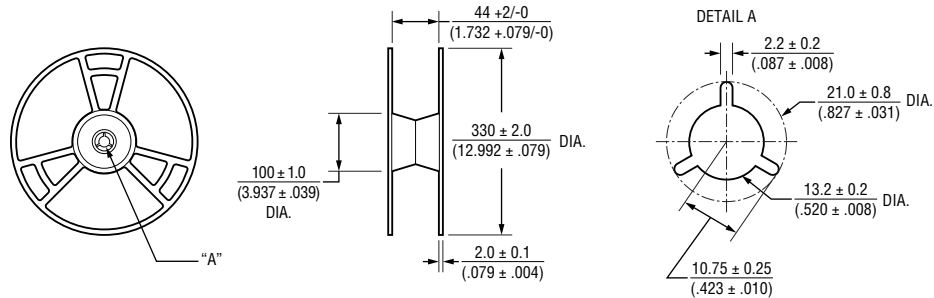
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HCTSM150102HL High Clearance and Creepage Distance Transformer



Packaging Specifications

Specifications and tolerances comply with EIA-481 requirements.



DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$



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