



**THE DATASHEET OF
HCTSM150102HL-E**





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:



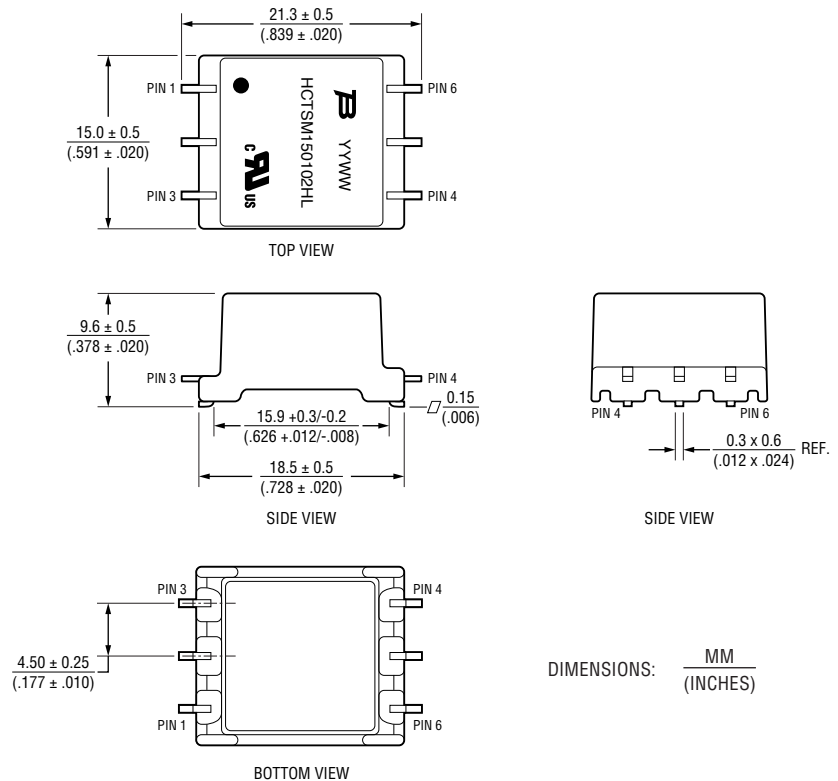
General Specifications

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

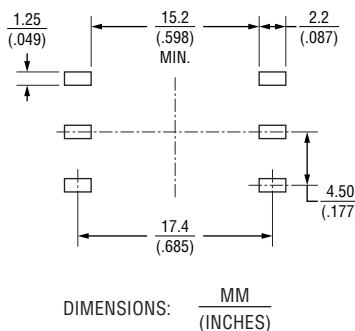
Packaging Specifications

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

Product Dimensions



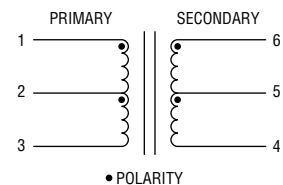
Recommended Layout



How To Order

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

Electrical Schematic



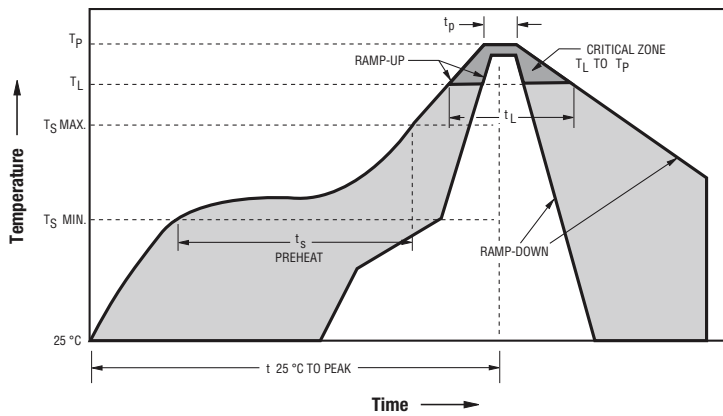
WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

* 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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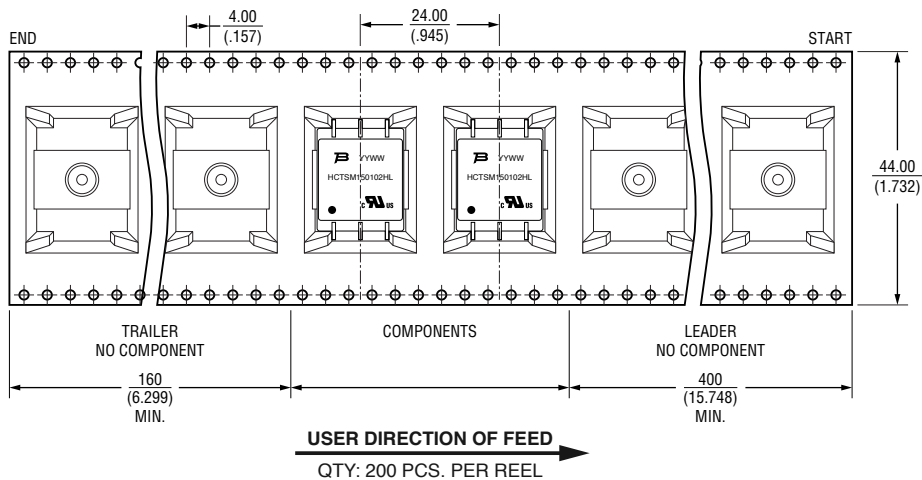
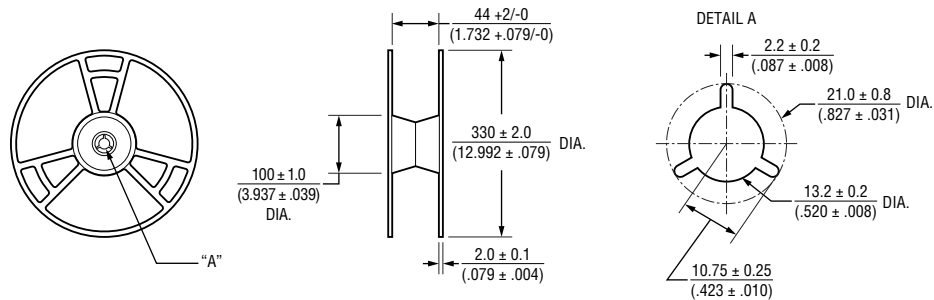
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HCTSM150102HL High Clearance and Creepage Distance Transformer

BOURNS®

Packaging Specifications

Specifications and tolerances comply with EIA-481 requirements.



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

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REV. 02/24

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