



Features

- Working voltage up to 1500 VDC
- Hi-Pot: 7640 VDC, 1 mA, 2 s
- Clearance distance >15 mm
- Creepage distance >15 mm
- Reinforced Class F insulation, up to 150 °C
- Overvoltage category II, pollution degree 2, Up to 4 km above sea level
- Complies with IEC 60664-1, IEC/UL 62368-1
- RoHS compliant*

HCTSM150102HLF High Clearance and Creepage Transformer

Additional Information

Click these links for more information:



General Specifications

Primary Inductance (100 kHz / 1 V / 0 A)
..... 80 μ H min.

Leakage Inductance (100 kHz / 0.1 V)
pin 1-3 4.0 μ H max.

DCR
1-3 0.3 Ω max.
6-4 0.7 Ω max.

Turns Ratio & Polarity
(1-3):(6-4) 1:2 \pm 3 %

Hi-Pot (Pri.-Sec.)
7640 VDC 1 mA, 2 s

Working Voltage up to 1500 VDC

Operating Temperature
..... -40 °C to +150 °C
(including temperature rise)

Storage Temperature
..... -25 °C to +85 °C

Moisture Sensitivity Level 1

ESD Classification (HBM) N/A

Packaging Specifications

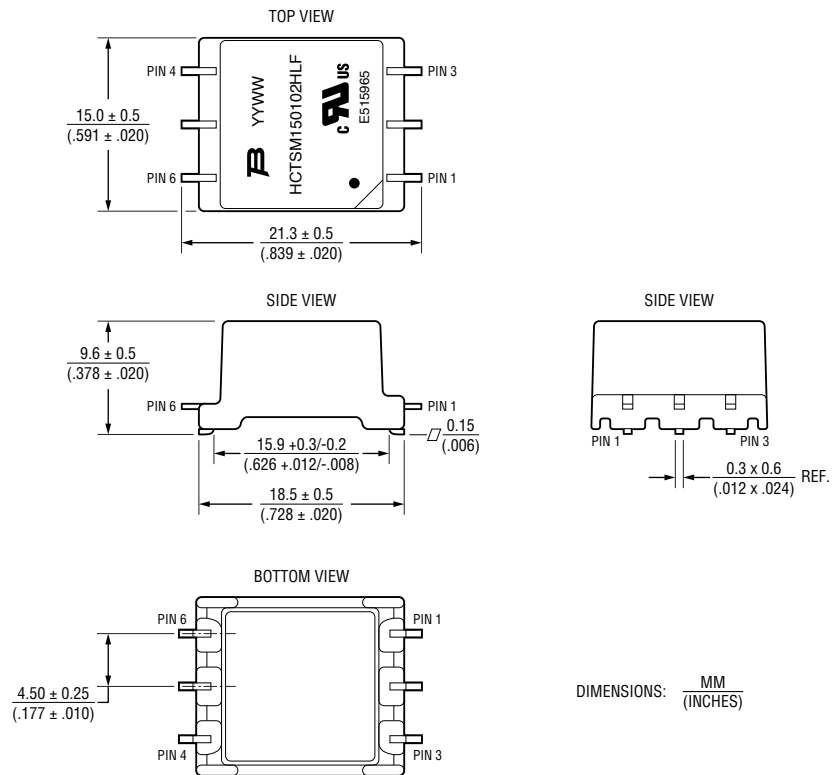
Tape & Reel 200 pcs./13-inch reel

How To Order

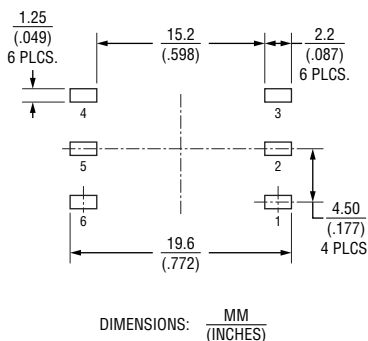
HCTSM150102H L F - E

Model
RoHS compliant
Internal code
Packaging
E = 200 pcs. per 13-inch Reel,
3 Reels per Box

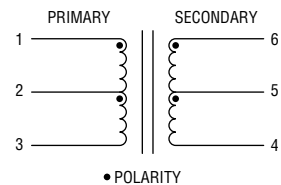
Product Dimensions



Recommended Layout



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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Temperature

Time

25

T_p

T_L

T_{smax}

T_{smin}

MAX. RAMP UP RATE = 3 °C/SEC.

MAX. RAMP DOWN RATE = 6 °C/SEC.

PREHEAT AREA

t_s

t_L

t_p

$T_c - 5\text{ }^{\circ}\text{C}$

Time 25 °C to Peak

REFLOW TIMES: 3 TIMES MAX.

Compliant to J-STD-020: level 1, no moisture sensitivity. (T_p: 245 °C max.)

Package Thickness	Volume mm ³ < 350	Volume mm ³ 350 - 2000	Volume mm ³ > 2000
< 1.6 mm	260 °C	260 °C	260 °C
1.6 mm - 2.5 mm	260 °C	250 °C	245 °C
> 2.5 mm	250 °C	245 °C	245 °C

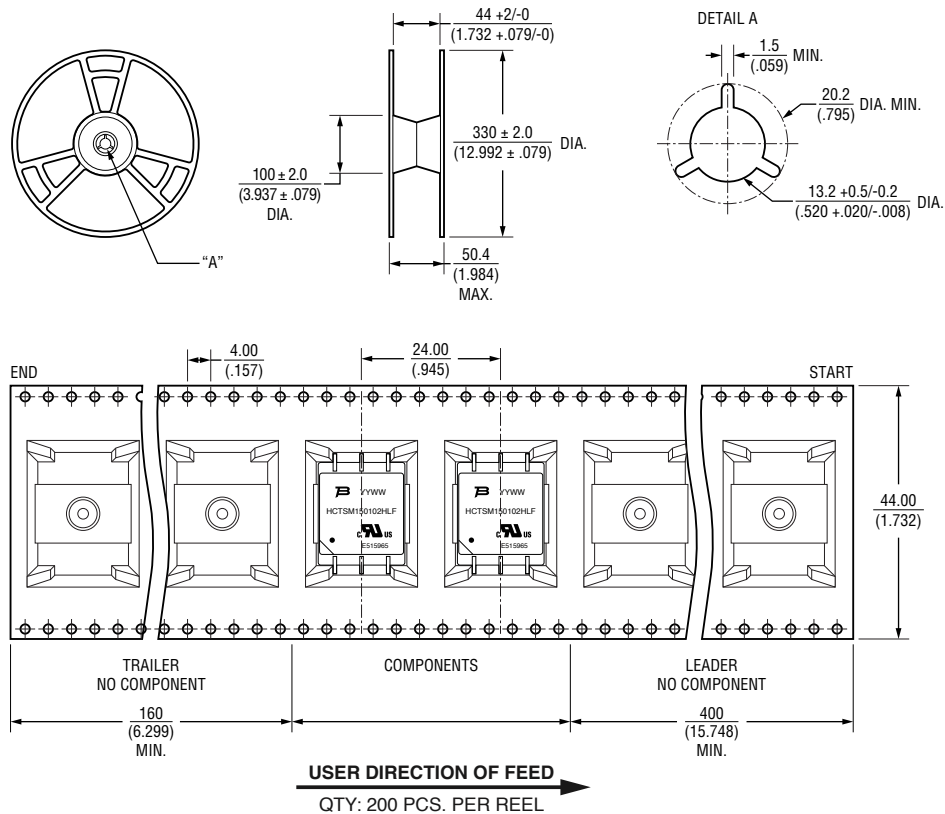
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HCTSM150102HLF High Clearance and Creepage Transformer

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Packaging Specifications

Specifications and tolerances comply with EIA-481 requirements.



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

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REV. 08/25

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