



Features

- Full automation and compact size for high voltage isolation
- Reinforced insulation for working voltage of 800 V
- Basic insulation for working voltage of 1000 V
- Creepage distance >8.0 mm
- Clearance distance >8.0 mm

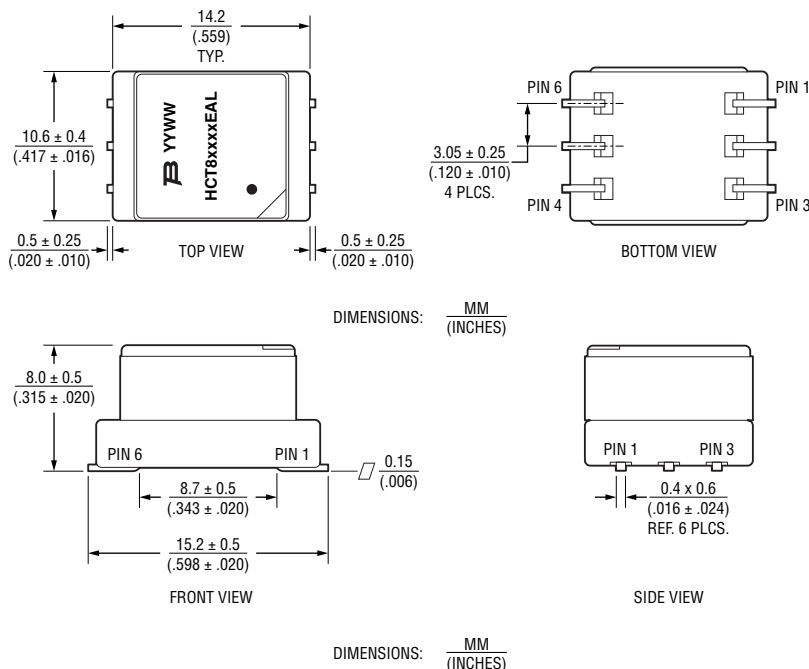
- Overvoltage Category II, Pollution Degree 2, up to 2 km above sea level
- AEC-Q200 compliant
- RoHS* and REACH Compliant

HCT8 Series High Clearance and Creepage Transformer

Electrical Specifications @ 25 °C

Bourns Part Number	Turns Ratio P(1-3): S(6-4)	Primary Inductance (μH min.)	Leakage Inductance @ 100 kHz, 0.1 V (all sec. pins shorted)		RDC (Ω) @ 25 °C		Hi-Pot Voltage
			1-3 (μH max.)	1-3 (μH max.)	1-3 (Ω max.)	6-4 (Ω max.)	
HCT80101EAL	1:1	160	0.8	0.5	0.5	0.55	5.0k VDC 1 mA 60 s.
HCT80102EAL	1:2		0.6			1.5	
HCT80201EAL	2:1		1			0.35	
HCT80304EAL	3:4		0.6			0.7	
HCT80305EAL	3:5		0.6			1.5	
HCT80308EAL	3:8		0.7			3	
HCT80403EAL	4:3		0.8			0.45	
HCT80803EAL	8:3		1.2			0.3	
HCT80809EAL	8:9		0.7			0.65	
HCT80910EAL	9:10		0.7			0.6	
HCT81017EAL	10:17		0.6			1.5	

Product Dimensions



Additional Information

Click these links for more information:



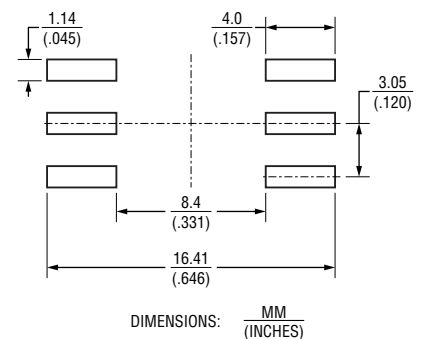
General Specifications

L (100 kHz / 1 V)
 -40 °C ~ +125 °C 160 μH
 Volt Second on Half Primaries:
 (1-2 or 2-3) 14 Vμs min.
 Rated Current 350 mA
 Hi-Pot (1 mA, 60 S) 5000 VDC
 Reinforced Insulation
 for Working Voltage 800 V
 Basic Insulation
 for Working Voltage 1000 V
 Operating Temperature
 -40 °C to +125 °C
 (Temperature rise included)
 Storage Temperature (Component)
 -40 °C to +125 °C
 Moisture Sensitivity Level 1

Materials

Core Mn-Zn Ferrite
 Wire Enameled/full-insulated copper

Recommended Layout



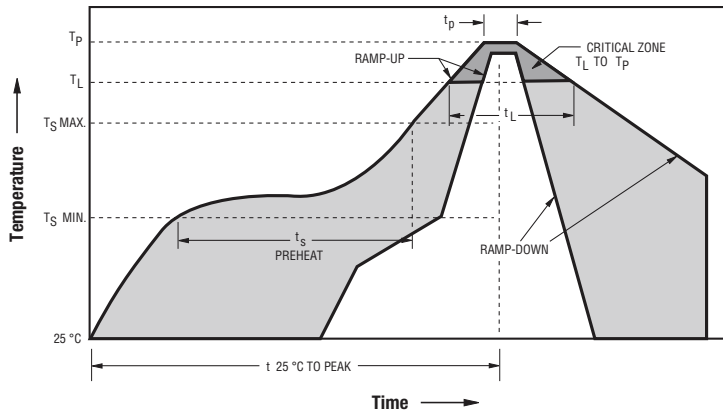
WARNING
Cancer and Reproductive Harm
www.P65Warnings.ca.gov

*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. The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at www.bourns.com/docs/legal/disclaimer.pdf.

HCT8 Series High Clearance and Creepage Transformer

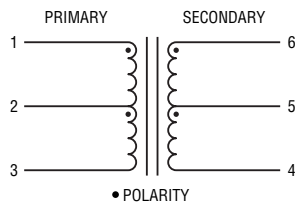


Reflow Solder Profile



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)	240-245 °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	245 °C

Electrical Schematic



How To Order

HCT8xxxxE A L - E

Model _____
 AEC-Q200 Compliancy Designator _____
 RoHS Compliancy Designator _____
 Packaging _____
 E = 400 pcs. per 13-inch Reel

Packaging Specifications

Tape & Reel 400 pcs./13-inch reel

Specifications are subject to change without notice.

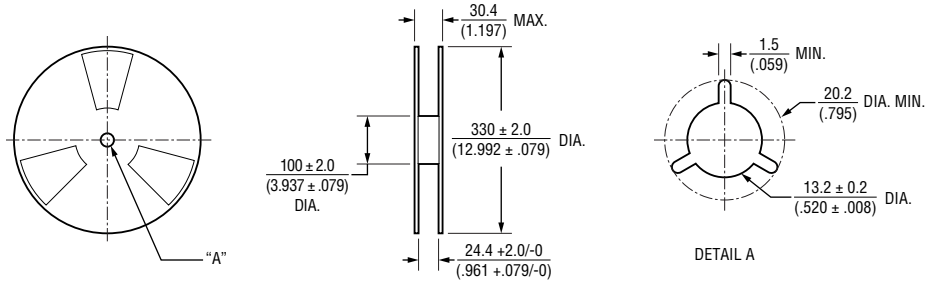
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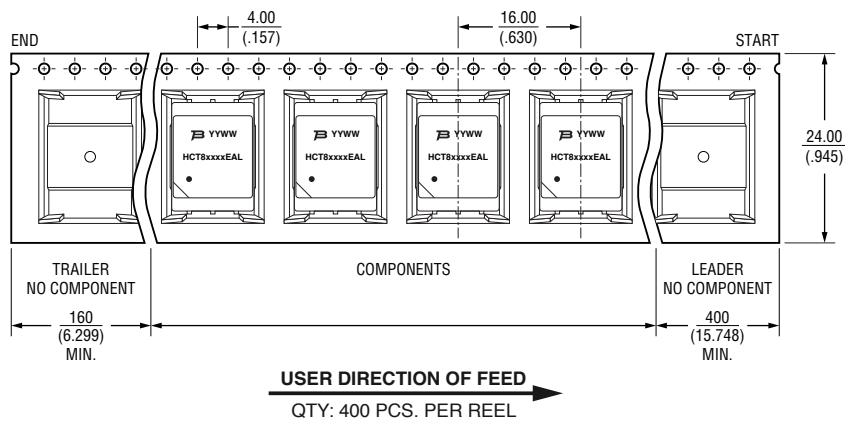
HCT8 Series High Clearance and Creepage Transformer

BOURNS®

Packaging Specifications



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



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