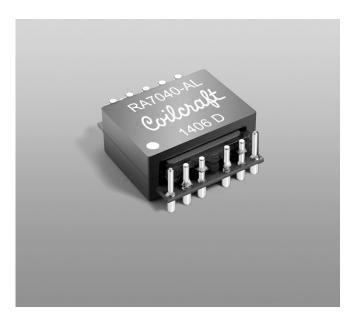


## **SMT Planar Transformer** For TI UCC 2897 12 V/150 W Active Clamp Forward



- Developed for Texas Instruments UCC2897 Active Clamp Forward (PMP9720 reference design)
- Designed for 48 60 Vdc input; 12 V, 13 A
- High efficiency; excellent DCR; very low leakage inductance; 1500 Vrms, one minute primary to secondary isolation.
- Provides 0.009" (0.229 mm) clearance above the seating plane

Core material Ferrite Terminations Matte tin over nickel over brass. Weight 12.7 g Ambient temperature -40°C to +125°C Maximum part temperature +165°C (ambient + temp rise) Storage temperature Component: -40°C to +125°C. Tray packaging: -40°C to +80°C Resistance to soldering heat Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity) Packaging 36 per tray PCB washing Tested to MIL-STD-202 Method 215 plus an additional

**PCB washing** Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See Doc787\_PCB\_Washing.pdf.

Part	Turns				Primary inductance <sup>1</sup>	Leakage inductance <sup>2</sup>	DCR max (mOhms)			Volt-time product typ <sup>4</sup>	
number	<b>N</b> 1	N2	Sec	Aux	±20 (μH)	max (µH)	<b>Pri</b> <sup>3</sup>	Sec	Aux	(Vµsec)	<b>Output</b> <sup>5</sup>
RA7040-AL	6	6	3	3	50	0.55	10.75	4.25	61.1	100	12 V, 13 A

1. Inductance is for the primary, measured on Agilent/HP 4284A at 200 kHz, 0.5 Vrms, 0 Adc with primary windings connected in parallel.

2. Leakage Inductance is for the primary, measured at 200 kHz, 0.5 Vrms, 0 Adc with primary windings connected in parallel and all secondary pins shorted.

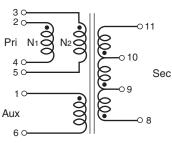
3. Primary DCR measured with primary windings connected in parallel

4. Volt-time product is based on primary windings connected in parallel.

5. Output of the secondary, 12 V 13 A, is from pins 11 - 8, Output of the aux winding is 12 V.

6. Electrical specifications at 25°C.

Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



Primary windings to be connected in parallel on the PC board.



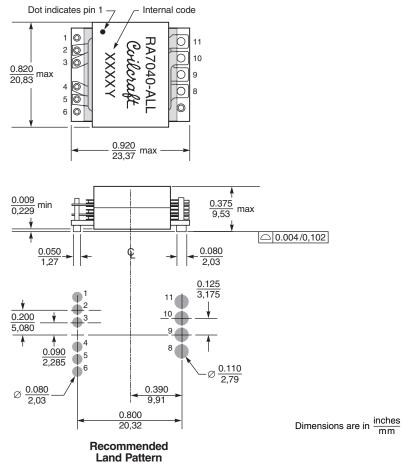
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## **RA7040-AL SMT Planar Transformer**





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