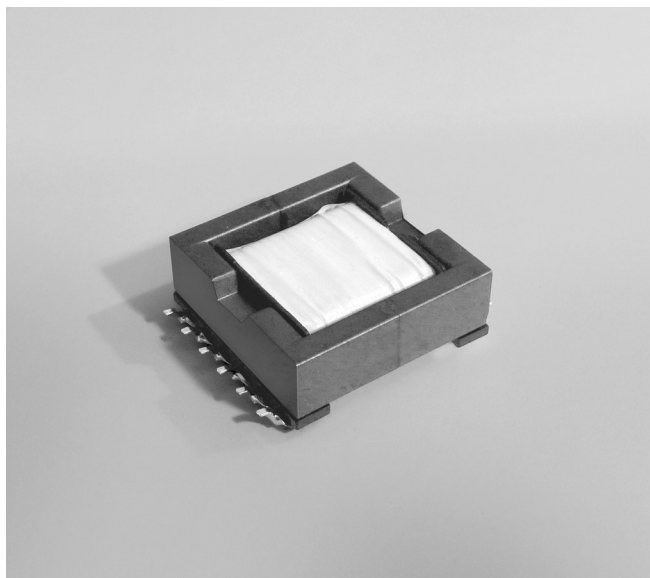


SMT Power Inductors

For Texas Instruments
SolarMagic Power Optimizer



- Developed for Texas Instruments SolarMagic™ Power Optimizer SM3320 series
- JA4487-AL is designed for 30 V to 100 V panels; JA4488-AL is designed for low voltage panels (<50 V)
- High current, low DCR, shielded power inductors
- Recessed board placement for a very low profile design

Core material Ferrite

Terminations RoHS compliant tin-silver over tin over nickel over phos bronze. Other terminations available at additional cost.

Weight 36.8 – 39.0 g

Ambient temperature –40°C to +125°C

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)

Failures in Time (FIT) / Mean Time Between Failures (MTBF)

38 per billion hours / 26,315,789 hours, calculated per Telcordia SR-332

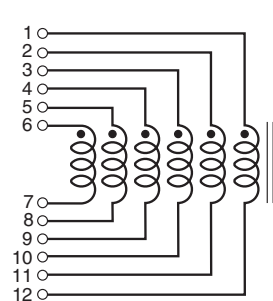
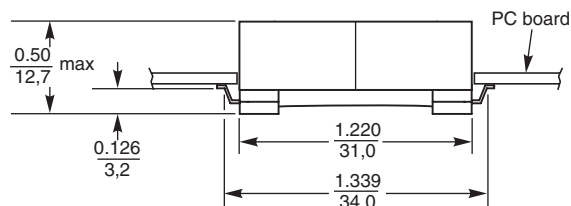
Packaging 24 per tray

PCB washing Tested with pure water or alcohol only. For other solvents, see Doc787_PCB_Washing.pdf

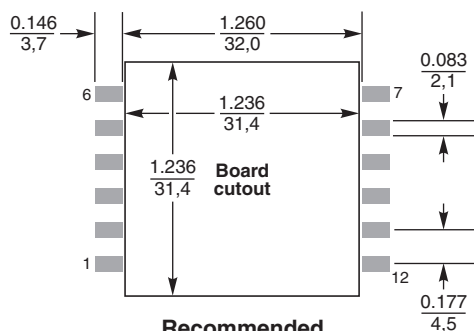
Part number	Inductance at 0 A ¹ ±10% (µH)	Inductance at I _{pk} ² min (µH)	DCR max ³ (mOhms)	I _{pk} ² (A)	Irms (A) ⁴	
					20°C rise	40°C rise
JA4487-AL	30	26	10.0	10.0	11.0	14.4
JA4488-AL	20	18	11.0	15.0	9.5	13.0

1. Inductance measured at 200 kHz, 1.0 Vrms, 0 Adc using an Agilent/HP 4263B impedance analyzer or equivalent.
2. Peak primary current drawn at minimum input voltage.
3. DCR is with all windings connected in parallel.
4. Current that causes the specified temperature rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings
5. Electrical specifications at 25°C.

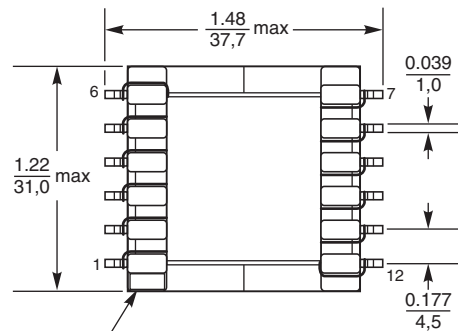
Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



Windings to be connected in parallel on the PC board



Recommended Land Pattern
(Viewed from underside of PC board)



White mark indicates pin 1
Dimensions are in inches/mm

For lowest profile, these parts are designed to be mounted to the underside of the PC board.



www.coilcraft.com

US +1-847-639-6400 sales@coilcraft.com
UK +44-1236-730595 sales@coilcraft-europe.com
Taiwan +886-2-2264 3646 sales@coilcraft.com.tw
China +86-21-6218 8074 sales@coilcraft.com.cn
Singapore + 65-6484 8412 sales@coilcraft.com.sg

Document 941 Revised 11/19/15

© Coilcraft Inc. 2015

This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.