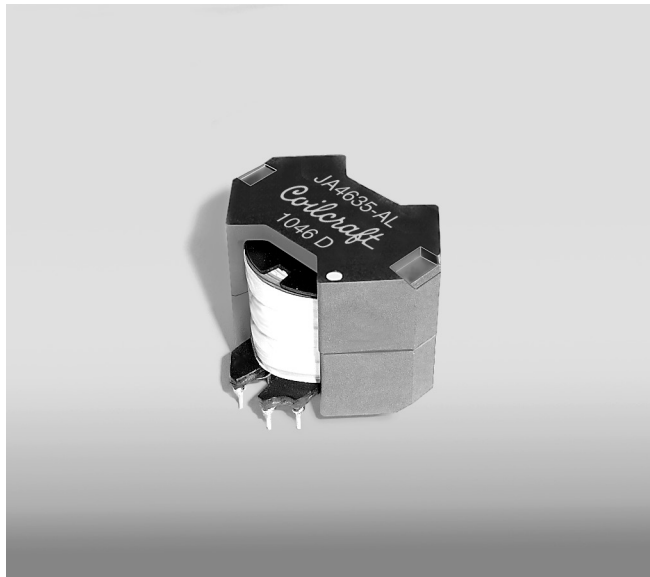


# Flyback Transformers

For Microchip Grid-Connected  
Solar Microinverter using dsPIC



- Listed on Bill of Material for Reference Design AN1338
- Input voltage: 22 Vdc – 55 Vdc
- 3000 Vrms, one minute isolation from primary to secondary windings

**Core material** Ferrite

**Terminations** RoHS tin-silver (96.5/3.5) over tin cover copper-plated steel wire

**Weight** 94.3 g

**Ambient temperature** –40°C to +85°C

**Storage temperature** Component: –40°C to +85°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

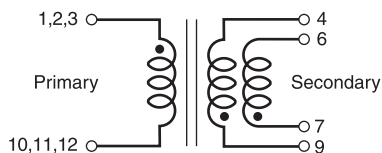
**Moisture Sensitivity Level (MSL)** 1 (unlimited floor life at <30°C / 85% relative humidity)

**Packaging** 20 per tray

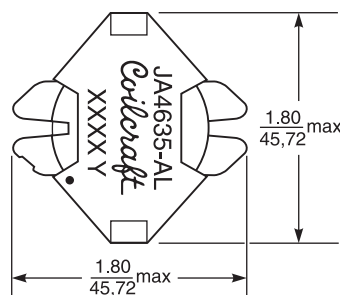
**PCB washing** Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787 PCB Washing.pdf](#).

Part number	Inductance at 0A <sup>1</sup> ±10% (µH)	DCR max (Ohms) <sup>2</sup>		SRF typ (kHz)	Leakage inductance <sup>3</sup> max (µH)	Turns ratio <sup>4</sup> pri:sec	Isat <sup>5</sup> (A)	Output
		pri	sec					
JA4635-AL	28	0.008	0.106	640	0.138	1:6	10.5	110 Vac
KA4823-CL	28	0.008	0.472	360	0.115	1:12	10.5	220 Vac

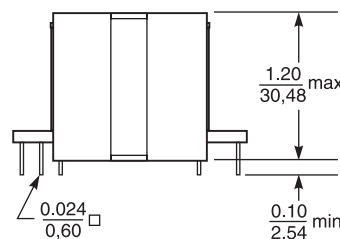
1. Inductance is measured at 150 kHz, 0.1 Vrms.
  2. DCR is with the secondary windings connected in parallel.
  3. Leakage inductance is for the three windings of the primary with the secondary windings shorted.
  4. Turns ratios are with the primary and secondary windings connected in parallel.
  5. DC current at which the inductance drops 10% (typical) from its value without current.
  6. Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



Pins 1, 2 and 3 to be connected together on the PC board.  
Pins 10, 11 and 12 to be connected together on the PC board.  
Secondary windings to be connected in parallel on the PC board



Parts manufactured prior to September 2011 may be marked differently.



Dimensions are in  $\frac{\text{inches}}{\text{mm}}$

**Recommended PC board layout**  
(0.10 inch / 2.54 mm grid)

