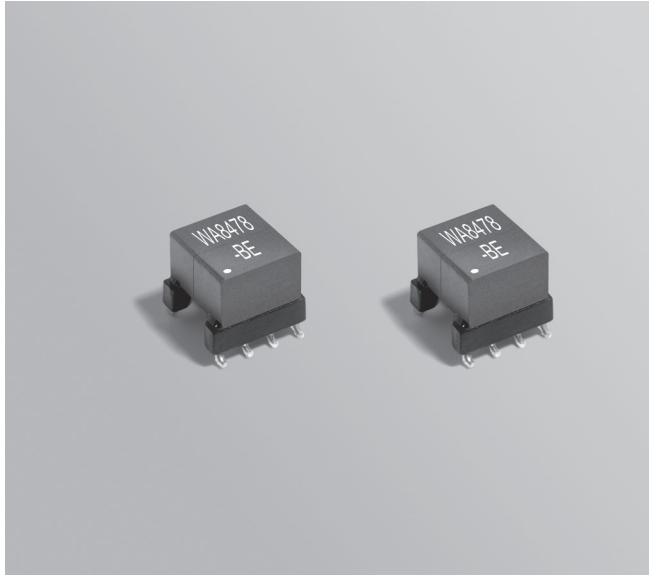


# Flyback Transformer

For Analog Devices ADP1031  
Isolated Micropower  
Management Unit



- Developed to use with isolated flyback DC-DC regulator in the Analog Devices ADP1031
- 2250 Vrms, one minute isolation from primary to secondary
- AEC-Q200 Grade 1 qualified (−40°C to +125°C ambient)

**Core material** Ferrite

**Environmental** RoHS compliant, halogen free

**Terminations** RoHS tin-silver-copper (95.5/3.8/0.7) over tin over nickel over phos bronze.

**Weight** 0.76 g

**Ambient temperature** −40°C to +125°C

**Maximum part temperature** +165°C

**Storage temperature** Component: −40°C to +165°C.

Tape and reel 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** 175 per 7"; 750 per reel, 13" reel Plastic tape: 24 mm wide, 0.40 mm thick, 12 mm pocket spacing, 7 mm pocket depth

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

Part number <sup>1</sup>	Input voltage (V)	Inductance <sup>2</sup> at 0 A ±10% (µH)	Inductance <sup>3</sup> at 0.15 A min (µH)	Leakage Inductance <sup>4</sup> max (µH)	DCR max (Ohms)		Turns ratio pri:sec	Isolation <sup>5</sup> (Vrms)	Output
					pri	sec			
WA8478-BE_	4.5 – 60	275	220	1.2	1.2	2.46	1 : 1	2250	24 V, 20 mA

1. When ordering, specify a **packaging** code:

**WA8478-BEC**

**Packaging:** C = 7" machine ready reel. EIA-481 embossed plastic tape (175 parts per reel). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer (\$25 charge)

D = 13" machine ready reel. EIA-481 embossed plastic tape. Factory order only, not stocked (750 parts per full reel).

2. Inductance is for the primary, measured on an Agilent/HP 4284 at 100 kHz, 0.1 Vrms, 0 Adc.

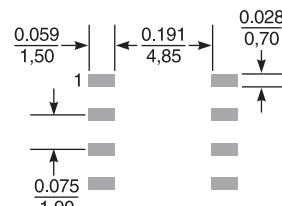
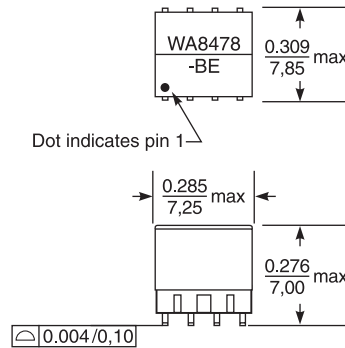
3. Minimum inductance is for the primary, measured at 100 KHz, 0.1 Vrms, 0.15 Adc.

4. Leakage inductance is for the primary with secondary winding shorted together.

5. Isolation (hipot) measured between windings for one minute.

6. Electrical specifications at 25°C.

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



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

## Schematic

