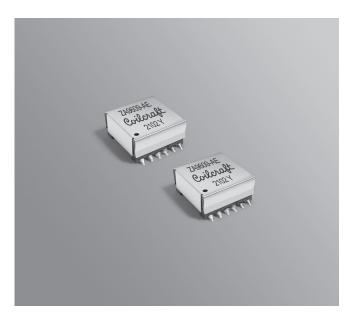


## Active Clamp Forward Transformer ZA9609-AE





- Active Clamp Forward Transformer for PMP22075 for Texas Instruments
- Wide input range 9 60 V
- · High efficiency in a small package
- Ideal for isolated 60 W applications such as 12 48 V PoE Power supply

## Core material Ferrite

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

Weight 27.5 g

Ambient temperature -40°C to +125°C

Max part temperature +165°C (ambient + temperature rise)

Storage temperature Component: -40°C to +125°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  $<30^{\circ}$ C / 85% relative humidity)

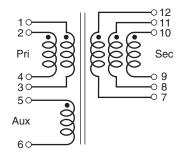
Packaging 24 per tray

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

| Part      | Inductance<br>at 0 A <sup>1</sup> | Leakage inductance    | DCR max<br>(Ohms) |        |      | Turns ratio     | Isolation <sup>3</sup> | Power |                     |
|-----------|-----------------------------------|-----------------------|-------------------|--------|------|-----------------|------------------------|-------|---------------------|
| number    | ±30% (µH)                         | max (µH) <sup>2</sup> | Pri               | Sec    | Aux  | Pri : Sec : Aux | (Vrms)                 | (W)   | Output <sup>4</sup> |
| ZA9609-AE | 113.9                             | 0.10                  | 0.0137            | 0.0138 | 0.24 | 1:1.57:1.57     | 1500                   | 60    | 12 V, 5 A           |

- 1. Inductance is for the primary, measured at 250 kHz, 0.1 Vrms, 0 Adc.
- Leakage inductance is for the primary and is measured with all secondary windings shorted.
- 3. 1500 Vrms, one minute isolation (hipot) from primary to secondary.
- 4. Output is for the secondary. Aux winding output is 12 V, 50 mA.
- 5. Electrical specifications at 25°C.

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



Connect pin 1 to 2, 3 to 4, pin 7 to 8 to 9, and pin 10 to 11 to 12 on the PC board

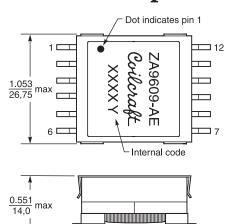




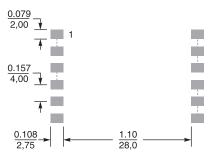
## Active Clamp Forward Transformer — ZA9609-AE

□0.004 / 0,10



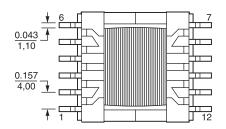


 $-\frac{1.102}{28,0} \text{ ref } -\frac{1.259}{32,00} \text{ max}$ 



## Recommended Land Pattern

Connect pin 1 to 2, 3 to 4, pin 7 to 8 to 9, and pin 10 to 11 to 12 on the PC board



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

