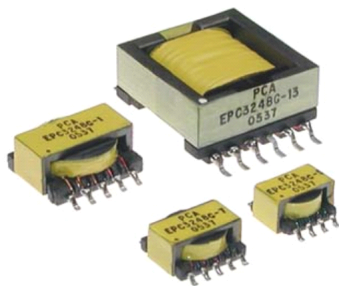


Power over Ethernet (PoE/PD) Flyback Transformer

EPC3248G-X & EPC3248G-X-LF



- Used in SMPS DC/DC Converter as a Flyback Transformer in PoE/Powered Devices (PD)
- Switching Frequency : 300 KHz to 400 KHz
- Add "-LF" after part number for Lead Free
- Input Voltage : 36-57 VDC
- 40 % Duty Cycle Typ. @ 48 VDC Input Voltage
- UL 94V-0 Recognized Materials
- UL 1446 Class B Insulation System
- Storage Temperature : -40°C to +125°C
- Operating Temperature : -40°C to +85°C

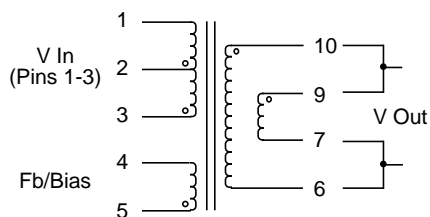
Electrical Specifications @ 25°C

| Part Number | Chipset | PoE Class | PD Power (Watts) | | Class Usage | Voltage (Vdc) | | Current (Amp.) | | Primary OCL (µH ± 10%) @ 300 KHz, 0.1 Vrms | Le (µH Max.) @ 300 KHz, 0.1 Vrms | Package Type | Schematic |
|-------------|----------|-----------|------------------|----------|-------------|---------------|---------|----------------|---------|--|----------------------------------|--------------|-----------|
| | | | Min. | Max. | | V Out | Fb Bias | V Out | Fb Bias | | | | |
| EPC3248G-1 | DPA425 | 0 | 0.44 | 12.95 | Default | 3.3 | 13.2 | 3.92 | 0.05 | 120 | 2.5 | ER14.5 | 1 |
| EPC3248G-2 | DPA425 | 0 | 0.44 | 12.95 | Default | 5.0 | 13.33 | 2.59 | 0.05 | 120 | 2.5 | ER14.5 | 1 |
| EPC3248G-3 | DPA425 | 0 | 0.44 | 12.95 | Default | 12.0 | 12.0 | 1.08 | 0.05 | 120 | 2.5 | ER14.5 | 1 |
| EPC3248G-4 | DPA423 | 1 | 0.44 | 3.84 | Optional | 3.3 | 13.2 | 1.16 | 0.05 | 200 | 2.5 | ER9.5 | 2 |
| EPC3248G-5 | DPA423 | 1 | 0.44 | 3.84 | Optional | 5.0 | 13.33 | 0.77 | 0.05 | 200 | 2.5 | ER9.5 | 2 |
| EPC3248G-6 | DPA423 | 1 | 0.44 | 3.84 | Optional | 12.0 | 12.0 | 0.32 | 0.05 | 200 | 2.5 | ER9.5 | 2 |
| EPC3248G-7 | DPA424 | 2 | 3.84 | 6.49 | Optional | 3.3 | 13.2 | 1.97 | 0.05 | 120 | 3.5 | ER11 | 1 |
| EPC3248G-8 | DPA424 | 2 | 3.84 | 6.49 | Optional | 5.0 | 13.0 | 1.30 | 0.05 | 120 | 3.5 | ER11 | 1 |
| EPC3248G-9 | DPA424 | 2 | 3.84 | 6.49 | Optional | 12.0 | 12.0 | 0.54 | 0.05 | 120 | 3.5 | ER11 | 1 |
| EPC3248G-10 | DPA424/5 | 3 | 6.49 | 12.95 | Optional | 3.3 | 13.2 | 3.92 | 0.05 | 120 | 2.5 | ER14.5 | 1 |
| EPC3248G-11 | DPA424/5 | 3 | 6.49 | 12.95 | Optional | 5.0 | 13.2 | 2.59 | 0.05 | 120 | 2.5 | ER14.5 | 1 |
| EPC3248G-12 | DPA424/5 | 3 | 6.49 | 12.95 | Optional | 12.0 | 12.0 | 1.08 | 0.05 | 120 | 2.5 | ER14.5 | 1 |
| EPC3248G-13 | DPA426 | 4(PoE+) | Reserved | Reserved | Reserved | 3.3 | 13.2 | 12.12 | 0.05 | 25 | 4.0 | EFD20 | 3 |
| EPC3248G-14 | DPA426 | 4(PoE+) | Reserved | Reserved | Reserved | 5.0 | 13.2 | 8.0 | 0.05 | 25 | 4.0 | EFD20 | 3 |
| EPC3248G-15 | DPA426 | 4(PoE+) | Reserved | Reserved | Reserved | 12.0 | 12.0 | 3.33 | 0.05 | 25 | 4.0 | EFD20 | 3 |

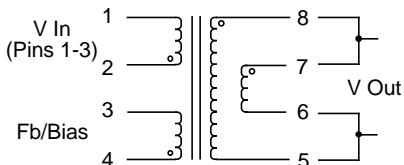
- Isolation : Pri., Bias to Sec. ; 1500 Vrms
- Isolation : Pri. to Bias ; 500 Vrms

| Notes : | EPC3248-X | EPC3248-X-LF |
|------------------------------------|------------------------------|------------------------------|
| 1. Lead Finish | SnPb | Hot Dipped Sn or SnCu |
| 2. Peak Solder Rating | 225°C | 260°C |
| 3. Moisture Sensitive Levels (MSL) | 1 (Unlimited, 30°C/60%RH) | 1 (Unlimited, 30°C/60%RH) |

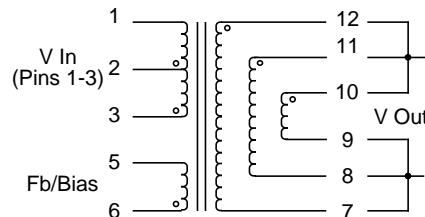
Schematic 1



Schematic 2



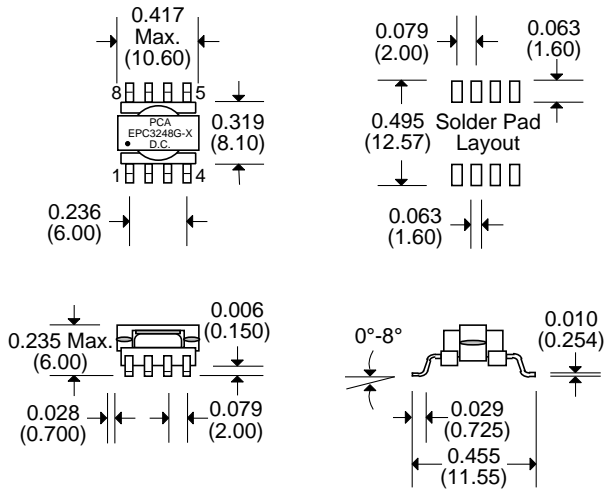
Schematic 3



Unless Otherwise Specified Dimensions are in Inches /mm ± .010 / .25

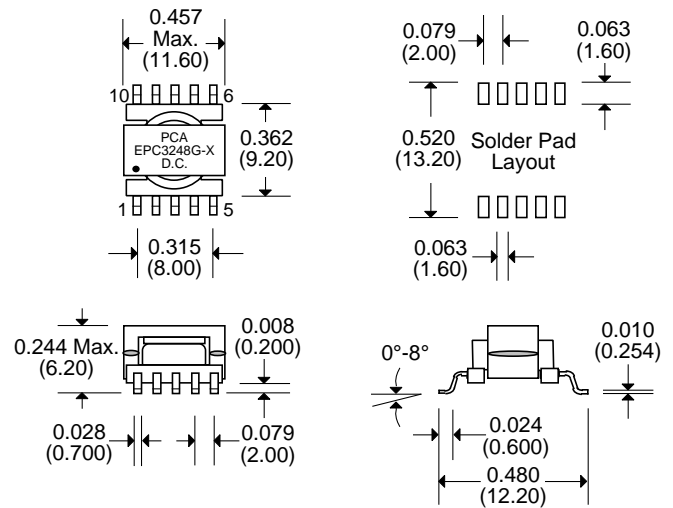
Power Over Ethernet (PoE/PD) Flyback Transformer EPC3248G-X & EPC3248G-X-LF

Package ER9.5



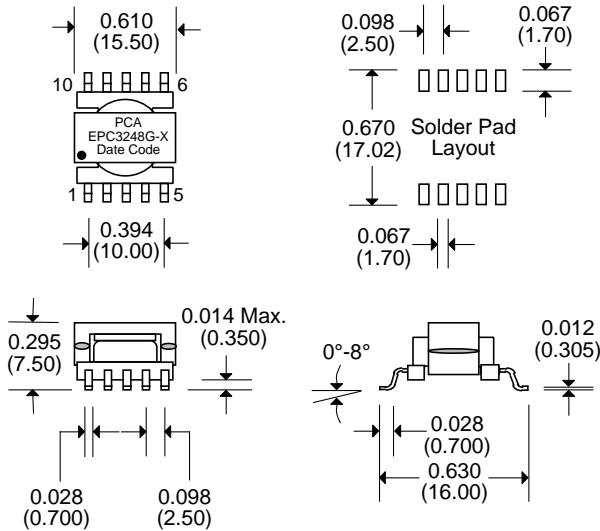
| | |
|-----------------------|-----------------------|
| Packaging Information | Tube: 52 pcs/tube |
| | T/R: 600 pcs/13" reel |

Package ER11



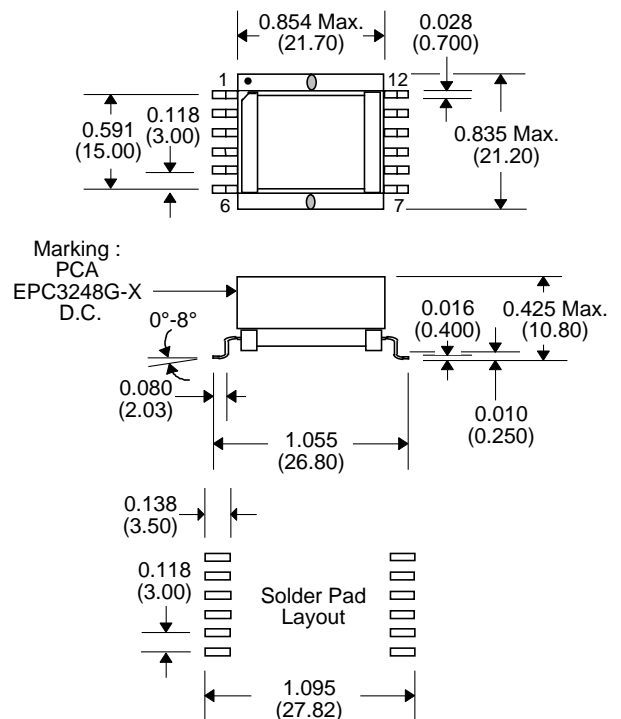
| | |
|-----------------------|-----------------------|
| Packaging Information | Tube: 44 pcs/tube |
| | T/R: 400 pcs/13" reel |

Package ER14.5



| | |
|-----------------------|-----------------------|
| Packaging Information | Tube: 36 pcs/tube |
| | T/R: 350 pcs/13" reel |

Package EFD20 (Reserved for Class 4 PoE+)



| | |
|-----------------------|-------------------|
| Packaging Information | Tray: 40 pcs/tray |
|-----------------------|-------------------|

Unless Otherwise Specified Dimensions are in Inches /mm ± .010 / .25