



SMT PoE Transformers ~ EER14.5XFS-LF SERIE

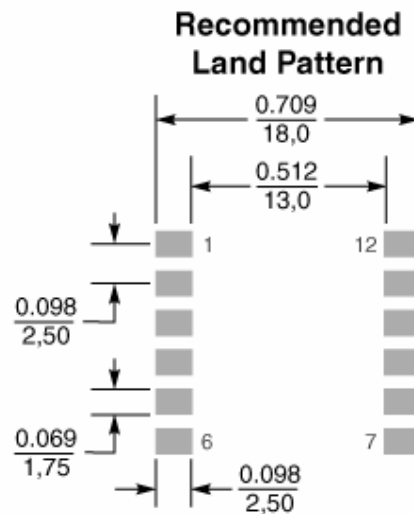
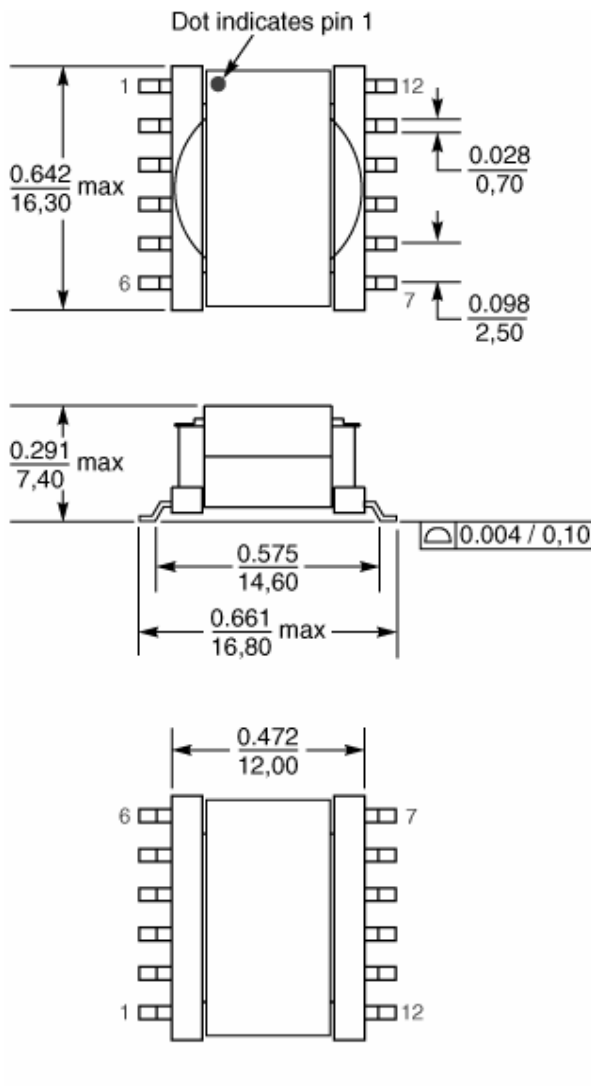


RoHS Compliant

PART NUMBERING SYSTEM



SHAPES AND DIMENSIONS





SMT PoE Transformers ~ EER14.5XFS-LF SERIES

FEATURES

- Developed for **Powered Devices in 6 Watt IEEE 802.3af** compliant **PoE** applications
- **36 – 72 V input.** Versions with versions for **6 Watt output**
- Versions for continuous and discontinuous modes of operation
- Bias winding output: **12 V, 20 mA ; 250 kHz switching frequency**
- **1500 Vrms** winding to winding **isolation**
- **RoHS-compliant.** 260°C compatible. Tin-silver over tin over nickel over phos bronze terminations.



ELECTRICAL CHARACTERISTICS :

PART NUMBER	L @ 0A ±10% uH	L @ Ipk ±10% uH	DCR(ohm) MAX			Leakage L(uH) Max.	Turns ratio		Ipk (A)	Out Put Pri : Sec
			Pri	Bias	Sec		Pri : Sec	Pri : Bias		

Continuous mode

EER14.5XFS-12LC-LF	204	183.6	0.293	0.083	0.545	5.80	1 : 0.333	1 : 0.344	0.52	12V ; 0.5A
EER14.5XFS-18LC-LF	167	150.3	0.303	0.017	0.570	7.80	1 : 0.063	1 : 0.344	0.62	1.8V ; 3.3A
EER14.5XFS-25LC-LF	177	159.3	0.530	0.027	0.660	7.00	1 : 0.083	1 : 0.344	0.60	2.5V ; 2.4A
EER14.5XFS-33LC-LF	184	165.6	0.286	0.026	0.515	4.00	1 : 0.100	1 : 0.344	0.57	3.3V ; 1.8A
EER14.5XFS-50LC-LF	193	173.7	0.344	0.043	0.660	8.00	1 : 0.143	1 : 0.344	0.55	5.0V ; 1.2A

Discontinuous mode

EER14.5XFS-12LD-LF	95	85.5	0.265	0.074	0.484	2.40	1 : 0.333	1 : 0.344	0.80	12V ; 0.5A
EER14.5XFS-18LD-LF	75	67.5	0.311	0.018	0.575	6.70	1 : 0.063	1 : 0.344	1.00	1.8V ; 3.3A
EER14.5XFS-25LD-LF	80	72.0	0.219	0.017	0.388	5.00	1 : 0.083	1 : 0.344	0.95	2.5V ; 2.4A
EER14.5XFS-33LD-LF	85	76.5	0.285	0.026	0.530	4.00	1 : 0.100	1 : 0.344	0.90	3.3V ; 1.8A
EER14.5XFS-50LD-LF	90	81.0	0.271	0.033	0.529	3.10	1 : 0.143	1 : 0.344	0.85	5.0V ; 1.2A

- 1) Inductance is for the primary, measured at 250 kHz, 0.1 Vrms, 0 Adc
- 2) DDesigned to remain in continuous mode operation at power levels of 3 Watts and above
- 3) Leakage inductance is for the primary winding with the secondary winding shorted
- 4) Peak primary current drawn at minimum input voltage
- 5) Output of the secondary is with the windings connected in parallel. Bias winding output is 12 V, 20 mA
- 6) Ambient temperature range: -40°C to +85°C
- 7) Storage temperature range: Component: -40°C to +85°C
- 8) Resistance to soldering heat: Three reflows at >217°C for 90 seconds (+260°C ±5°C for 20 – 40 seconds, allowing parts to cool to room temperature between.