

WE-FB

Flyback Transformer

LT3573 / LT3574 / LT3575 / LT3748



Characteristics

- Standard transformers for various output voltages/ currents available
- Easy design of custom power supply due to standard circuit and change of transformers and two components for feedback loop
- Isolation voltage up to 2.5 kV

Applications

- Isolated power design
- Sensor interfaces
- Isolated telecom converters
- High power "Automotive" supplies
- Power over Ethernet

More design support notes to download on www.we-online.com/LT

* not AECQ 200 tested & approved

Assembled demo boards with option to change included transformer

Order Code**	LT IC	Demoboard	Power (W)	Transformer assembled on board		Transformer 2***		Transformer 3***	
				Order Code	Ouput Voltage	Order Code	Ouput Voltage	Order Code	Ouput Voltage
750 105	LT3574	DC1636A	2.5	750 370 041	5 V / 0.35 A	750 311 304	3.3 V / 0.7 A	750 310 799	12 V / 0.15 A
750 103	LT3573	DC1228A	7	750 370 047	5 V / 1 A	-	-	-	-
750 106	LT3575	DC1643A	10	750 311 675	5 V / 1.4 A	750 310 564	12 V / 0.5 A	750 310 559	3.3 V / 1.5 A
750 107	LT3748	DC1557A	12	750 311 439	12 V / 1 A	750 310 688	3.3 V / 4 A	750 311 689	5 V / 3 A
750 108	LT3748	DC1694A	30	750 311 607	12 V / 2.5 A	750 311 599	15 V / 2 A	750 311 608	24 V / 1.3 A

** all datasheets are available on www.we-online.com

*** different set-ups possible with additional transformers which are included in the design kits

Electrical properties* (sorted by power)

Reference to Linear Technology Specification				All possible OFF THE SHELF transformer											
up to 3 W	up to 7 W	up to 14 W	external MOSFET	WE Order Code	Power (W)	Core	U _{in} (V)	U _{out} (V)	I _{out} (A)	Turns ratio NP:NS	L _{pri} (μH)	Leakage (nH)	Isolation (V)	I _{sat} (A)	
			LT3748	750 311 691	< 10	EP5	8–15	150	0.001	5:1	60	1000	1500	0.25	
	LT3573			750 310 799	< 10	EP7	18–30	15.0	0.4	1:1	25	125	1500	2.0	
LT3574	LT3573			750 370 040	< 10	EP7	18–30	5.0	1.0	3:1	30	200	1500	1.7	
LT3574	LT3573			750 370 041	< 10	EP7	18–30	5.0	1.0	3:1	50	450	1500	1.6	
LT3574	LT3573			750 370 047	< 10	EP7	18–30	5.0	1.0	3:1	30	150	1500	1.7	
	LT3573			750 370 058	< 10	EP7	18–30	15.0	0.4	1:1	25	185	1500	2.0	
	LT3573			750 370 059	< 10	EP7	18–30	5.0	1.0	3:1	50	500	1500	1.6	
			LT3748	750 311 692	< 10	EP7	8–15	±150	0.001	5:1	80	2000	1500	1.0	
	LT3573			750 370 042	< 10	ER9.5	5	5.0	0.2	1:1	15	250	1500	1.5	
	LT3573	LT3575		750 310 471	< 10	EP10	9–30	5.0	1.0	3:1	25	430	1500	2.6	
	LT3573	LT3575		750 310 559	< 10	EP10	12–30	3.3	1.3	4:1	24	500	1500	2.1	
	LT3573	LT3575		750 310 562	< 10	EP10	18–30	12.0	0.5	2:1	25	500	1500	2.8	
	LT3573	LT3575		750 310 563	< 10	EP10	18–30	12.0	0.4	2:1	25	500	1500	2.8	
LT3574	LT3573	LT3575		750 310 564	< 10	EP10	12–30	±5.0	1.0	3:1	63	600	1500	–	
			LT3748	750 311 486	< 10	EP13	12	±200	0.002	1:10	100	4500	1500	2.0	
			LT3748	750 811 048	< 10	EE16	100–400	30	0.30	4.387:1	1500	14000	IEC61558-2-12	0.65	
			LT3748	750 311 889	< 10	EFD25	28	250	0.1	1:5	37	160	500	2.95	
		LT3575		750 311 303	10–15	EP10	9–30	5.0	3.0	5:1	50	800	1500	2.25	
LT3574		LT3575		750 311 304	10–15	EP10	9–30	5.0	3.0	4:1	50	850	1500	2.5	
		LT3575		750 311 305	10–15	EP10	9–30	12.0	1.0	3:1	50	1200	1500	2.8	
		LT3575		750 311 306	10–15	EP10	9–30	12.0	1.0	3:1	100	1750	1500	1.65	
LT3574		LT3575		750 311 307	10–15	EP10	9–30	24.0	0.5	2:1	100	2000	1500	1.9	
LT3574		LT3575		750 311 308	10–15	EP10	9–30	24.0	0.5	1:1	100	2100	1500	2.1	
	LT3573	LT3575	LT3748	750 311 675	10–15	EP10	9–30	5.0	2.0	3:1	25.0	130	1500	2.5	
		LT3575	LT3748	750 311 567	10–15	EP10	10–40	5.0	3.0	2:1	7.0	800	1500	11.2	
			LT3748	750 311 424	10–15	EP13	36	12.0	1.0	3:1	100	900	1500	2.4	
			LT3748	750 311 456	10–15	EP13	36	12.0	1.0	3:1	100	900	2500	2.4	
		LT3575	LT3748	750 311 458	10–15	EP13	36	3.3	4.0	3:1	15.0	175	2500	5.0	
		LT3575	LT3748	750 311 564	10–15	EP13	10–40	5.0	3.0	3:1	9.07	120	1500	8.0	
		LT3575	LT3748	750 311 624	10–15	EP13	10–40	15.0	1.0	1.5:1	9.0	180	1500	>8.0	
		LT3575	LT3748	750 311 625	10–15	EP13	10–40	3.3	4.0	4:1	9.0	350	1500	>8.0	
		LT3575	LT3748	750 311 856	10–15	EP13	16–24	4 x 15	4 x 0.2	1:4:4:4:4	3.8	250	1000	>12	
		LT3575		750 311 342	10–15	EFD20	36	5.0	3.0	2:1	15.0	650	1500	5.8	
			LT3748	750 311 911	10–15	EE20	16–24	4 x 15	4 x 0.2	1:3:3:3:3	6.8	100	1500	–	
		LT3575	LT3748	750 311 422	15–25	EP13	36	5.0	4.0	5:1	50.0	600	1500	3.3	
		LT3575	LT3748	750 311 423	15–25	EP13	36	5.0	4.0	2:1	50.0	600	1500	3.85	
		LT3575	LT3748	750 311 439	15–25	EP13	37–57	12.0	2.1	2:1	37.0	750	1500	2.8	
		LT3575	LT3748	750 311 457	15–25	EP13	36	5.0	4.0	4:1	50.0	600	2500	3.7	
		LT3575	LT3748	750 311 688	15–25	EP13	36	5.0	4.0	5:1	50.0	600	1500	3.1	
		LT3575	LT3748	750 311 689	15–25	EP13	36	5.0	4.0	4:1	50.0	600	2500	3.7	
			LT3748	750 311 385	25–35	EP13	18–60	13.0	2.3	1.25:1	15.0	100	1500	6.75	
			LT3748	750 310 617	25–35	EFD20	9–36	12.0	3.0	1:1.16	4.5	150	1500	–	
			LT3748	750 311 597	25–35	EFD20	20–48	5.0	6.0	3:1	6.0	300	1500	9.5	
			LT3748	750 311 598	25–35	EFD20	20–48	12.0	2.5	2:1	8.3	300	1500	9.0	
			LT3748	750 311 599	25–35	EFD20	20–48	15.0	2.0	3:2	8.0	500	1500	12.0	
			LT3748	750 311 600	25–35	EFD20	30–75	15.0	2.0	2:1	12.0	500	1500	11.0	
			LT3748	750 311 604	25–35	EFD20	20–48	24.0	1.3	1:1	8.0	300	1500	9.5	
			LT3748	750 311 605	25–35	EFD20	30–75	5.0	6.0	7:2	15.0	500	1500	9.5	
			LT3748	750 311 607	25–35	EFD20	30–75	12.0	2.5	5:2	14.0	500	1500	9.5	
			LT3748	750 311 608	25–35	EFD20	30–75	24.0	1.3	3:2	12.0	500	1500	9.0	
			LT3748	750 311 797	35–45	EFD20	18–100	12	2.5	2.5:1	14.0	210	4000	11.5	
			LT3748	750 311 589	35–45	EFD25	20–48	5.0	9.0	3:1	6.0	200	1500	18.0	
			LT3748	750 311 590	35–45	EFD25	20–48	12.0	3.8	2:1	8.0	200	1500	18.0	
			LT3748	750 311 591	35–45	EFD25	20–48	15.0	3.0	3:2	8.0	200	1500	20.0	
			LT3748	750 311 592	35–45	EFD25	20–48	24.0	1.9	1:1	8.0	200	1500	18.0	
			LT3748	750 311 593	35–45	EFD25	30–75	5.0	9.0	7:2	15.0	300	1500	18.0	
			LT3748	750 311 594	35–45	EFD25	30–75	12.0	3.8	5:2	15.0	400	1500	18.0	
			LT3748	750 311 595	35–45	EFD25	30–75	15.0	3.0	2:1	12.0	200	1500	16.0	
			LT3748	750 311 596	35–45	EFD25	30–75	24.0	1.9	3:2	12.0	200	1500	18.0	
			LT3748	750 311 771	35–45	EFD25	100–400	15.0	3.0	6:1	500	5000	2500	2.5	
			LT3748	750 310 988	35–45	EFD25	12	48.0	0.85	1:4.42	14.0	200	1500	>15	
			LT3748	750 311 783	>45	EFD25	19–70	24	2.5	1.5:1	20	170	1500	16	

* Dependent on application, the transformer specification can differ slightly to data sheet