Tech Power electronics
POSITIVE ENERGY

HIGH FREQUENCY TRANSFORMERS

TECH POWER ELECTRONICS CAN HELP YOU FOR YOUR HIGH FREQUENCY POWER CONVERSION TRANSFORMER DESIGN.

TO REDUCE PRICE, DEVELOPMENT AND PROTOTYPE LEAD-TIMES, WE HAVE SET UP STANDARD PLATFORMS FOR DIFFERENT APPLICATIONS AND TYPOLOGIES. FOR THESE OPTIMIZED PLATFORMS, WE HOLD ALL THE RAW MATERIAL COMPONENTS ON STOCK TO REDUCE PROTOTYPING LEAD-TIME.

We have created a file to have a quick overview of the selection of platform depending on typology and frequency, this is purely indicative, of course this can change depending on each specific request. Our engineers are open to any request and have the experience and skills to optimize the design for each specific demand including very high constrain environment, specific insulation, specific configurations, etc… Don't hesitate to contact us for any request

TYPICAL OUTPUT POWER (W) VS FREQUENCY AND TOPOLOGY

		EE13	EE16	EF20	EF25	ETD29	ETD34	ETD39	ETD44	ETD49
Ae (mm²) Cross section area		15,9	18,4	32	52	76	97	125	173	211
Sb (mm²) Bobbin winding area		22	26	34	61	95	123	177	214	273
Ae*Sb (mm4)		349,8	478,4	1088	3172	7220	11931	22125	37022	57603
Push Pull	50 kHz	10	20	30	50	120	200	300	510	800
	100 kHz	15	35	50	100	220	350	530	900	1380
	200 kHz	20	50	70	140	310	500	760	1300	2000
Forward	50 kHz	7	15	15	25	80	130	200	350	550
	100 kHz	10	25	35	70	150	240	360	600	950
	200 kHz	14	35	45	95	200	330	500	800	1300
Flyback	50 kHz	6	10	15	30	75	120	180	300	460
	100 kHz	10	20	30	60	135	220	330	560	850
	200 kHz	15	30	40	85	190	310	460	780	1190

		E42/21/20	E55/28/21	E55/28/25	PQ20/16	PQ20/20	PQ26/25	PQ32/30	PQ35/35	PQ40/40
Ae (mm²) Cross section area		233	353	420	62	62	118	161	196	201
Sb (mm²) Bobbin winding area		172	250	280	23	36	48	95	154	240
Ae*Sb (mm4)		40076	88250	117600	1426	2232	5664	15295	30184	48240
Push Pull	50 kHz	400	750	1050	20	30	60	150	320	480
	100 kHz	700	1300	1800	35	50	100	250	530	800
	200 kHz	1000	1900	2600	50	70	140	355	750	1100
Forward	50 kHz	270	500	720	40	50	110	190	250	370
	100 kHz	450	830	1200	70	90	200	340	430	650
	200 kHz	600	1200	1700	100	120	275	450	590	900
Flyback	50 kHz	240	440	600	10	15	30	90	180	280
	100 kHz	430	800	1100	20	30	60	160	330	500
	200 kHz	600	1100	1500	30	40	80	220	450	700

NOTES : These values are indicative only. Final sizing of the transformer will depend on a number of interrelated variables. The data in the above table should be considered a starting point only. If safety agency is required, the final size may be significantly larger than the data in the table would indicate.