

SWITCHING TRANSFORMERS TEE, TEI SERIES

FEATURES:

- Possessing of high permeability
- High saturation flux density
- Low loss, at 100°C the power loss goes bottom

OPTIONS:

- Bulk packaging is standard
- Custom design available

COMMON APPLICATIONS:

- Drive transformers
- Main transformers
- Smoothing chokes
- General purpose use

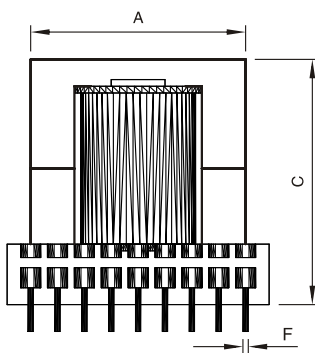
ELECTRICAL CHARACTERISTICS

Part No.	Type	No. of Terminal pins	Dimensions(mm)						Max. output (VA)
			Max	Max	Max	± 0.3	± 0.5	± 0.1	
			A	B	C	D	E	F	
TEI 8.3-A	V	6	8.5	8.5	9.0	2.5	6.0	0.5	3
TEE 8.3-B	H	6	8.5	8.5	7.0	2.5	6.0	0.5	3
TEE 8.3-C	H	4	8.5	9.5	9.0	5.0	6.8	0.5	3
TEI 10-A	V	8	10.5	11.0	11.0	2.5	8.0	0.5	5
TEI 10-B	H	8	11.0	13.0	10.5	2.5	10.5	0.5	5
TEI 10-C	H	4	10.0	9.5	10.0	5.0	6.8	0.5	5
TEI 12.5-A	V	10	13.0	13.0	10.0	2.5	7.5	0.6	8
TEE 12-A	H	4	12.5	11.0	12.5	8.0	9.0	0.6	8
TEE 13-A	V	10	13.5	13.0	12.0	2.5	8.7	0.6	9
TEI 14-A	V	6	14.5	14.5	13.0	3.5	11.0	0.6	15
TEE 16-A	V	6	16.5	13.5	13.0	3.0	9.0	0.6	25
TEE 16-B	H	8	16.5	14.5	15.0	3.0	11.0	0.6	25
TEE 16-C	H	8	16.5	14.5	15.0	3.5	12.0	0.6	25
TEE 16-D	V	10	16.5	13.5	14.5	3.25	10.5	0.6	25
TEE 16-F	H	10	16.5	19.0	14.0	3.2	15.5	0.8	25
TEEL 16-A	V	10	22.0	16.5	30.0	4.0	10.3	0.6	25
TEE 19-A	V	6	20.0	18.0	18.0	4.1	14.0	0.7	35
TEE 19-B	V	6	20.0	16.0	18.0	4.7	11.6	0.6	35
TEE 19-C	H	8	20.0	18.0	16.5	3.8/5	12.5	0.7	35
TEEL 19-A	V	8	20.0	20.5	32.0	3.8/4.8	15.0	0.8	35
TEEL 19-B	H	6	19.5	32.0	13.0	5	24.2	0.8	35
TEEL 19-C	V	10	23.0	16.5	32.0	4	10.0	0.8	35
TEE 20-A	H	8	20.5	19.0	13.0	5	15.0	0.8	35
TEE 22-A	V	10	22.5	16.5	20.0	4	10.2	0.8	45
TEE 22-B	V	8	22.5	17.0	20.0	5	12.4	0.8	45
TEE 22-C	H	9	22.5	24.5	16.5	3.5/5	17.2	0.8	45
TEE 25-A	V	8	25.5	18.0	22.0	5	12.4	0.8	65
TEE 25-B	V	10	26.0	20.5	22.0	5	15.2	0.8	65
TEE25-C	H	10	27.0	24.0	24.0	4.0/5	14.6	0.8	65
TEEL 25-A	H	14	27.5	33.5	21.0	4.0	27.1	0.8	65

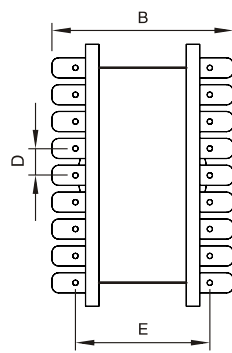
Part No.	Type	No. of Terminal pins	Dimensions(mm)						Max. output (VA)
			Max	Max	Max	± 0.3	± 0.5	± 0.1	
			A	B	C	D	E	F	
TEL 25-B	V	14	27.5	21.0	35.0	4.0	15.0	0.8	65
TEI 28-A	V	12	29.5	25.0	24.0	5.0	17.5	0.8	100
TEI 28-B	V	10	28.5	25.0	35.0	5.0	20.0	0.8	100
TEI 28-C	H	8	28.5	25.0	25.0	5.0	17.5	0.8	100
TEI 30-A	V	10	31.0	22.0	26.0	5.0	17.6	0.8	155
TEI 30-B	V	12	31.0	26.0	26.0	5.0	20.0	0.8	155
TEE 30-A	H	10	30.5	30.0	20.5	5.0	25.0	0.8	155
TEE 30-B	H	12	30.5	30.0	20.5	5.0	25.0	0.8	155
TEI 33-A	V	14	34.0	28.0	30.0	5.0	22.5	0.8	200
TEI 33-B	V	12	34.0	28.0	30.0	5.0	22.5	0.8	200
TEI 33-C	V	16	39.0	29.0	30.0	5.0	22.5	0.8	200
TEE 35-A	H	12	38.0	30.0	26.0	3.8/5.1	22.0	0.8	215
TEE 35-B	V	10	35.5	26.0	28.0	5.0	20.0	0.8	215
TEE 35-C	V	14	35.5	26.0	28.0	5.0	20.0	0.8	215
TEEL 35-A	V	15	36.5	27.5	50.0	5.0	22.5	0.8	215
TEI 35-A	V	12	35.5	28.5	29.0	5/7.5	20.0	1.0	215
TEI 40-A	V	12	40.5	29.0	32.0	5.0	22.5	0.8	345
TEI 40-B	H	12	40.5	37.0	27.0	5.0	28.2	1.0	345
TEI 40-C	V	16	42.0	28.0	35.0	5.0	22.5	0.8	345
TEI 40-D	H	14	40.5	35.0	29.0	5.0	25.8	0.8	345
TEE 42-A	H	16	44.5	42.0	41.5	5.0	34.0	1.0	400
TEE 42-B	H	12	47.0	42.0	39.5	5/7.5	33.0	1.0	400
TEE 42-C	V	18	46.0	32.5	46.0	5.0	27.5	1.0	400
TEE 42-D	V	12	46.0	42.5	37.0	7.4	36.4	1.0	420
TEE 42-E	V	12	43.0	40.5	45.0	5.0	32.5	1.0	420
TEE 42-F	H	17	43.0	47.0	45.0	2.5/5	37.7	1.0	420
TEE 42-G	V	18	46.0	38.0	47.0	5.0	30.0	1.0	420
TEE 50-A	V	18	51.0	40.0	40.0	5.0	30.5	1.0	500
TEE 55-A	H	20	56.0	55.0	50.5	5/7.5	45.2	1.0	814

Note: The output power is only for forward model and the frequency at 100kHz

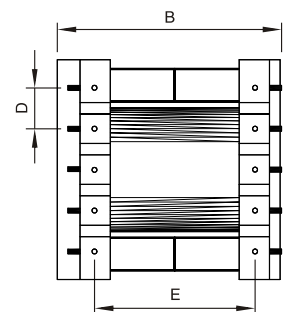
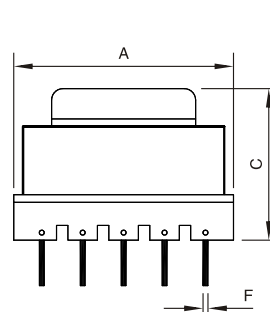
PHYSICAL CHARACTERISTICS



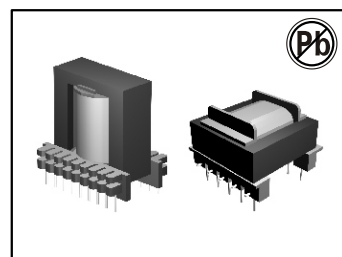
Type V



Type H



SWITCHING TRANSFORMERS TER SERIES



FEATURES:

- Centre section of the core is round easily design high-power switch transformers
- Low leakage

OPTIONS:

- Bulk packaging is standard
- Custom design available

COMMON APPLICATIONS:

- Drive transformers
- Main transformers
- Smoothing chokes
- General purpose use

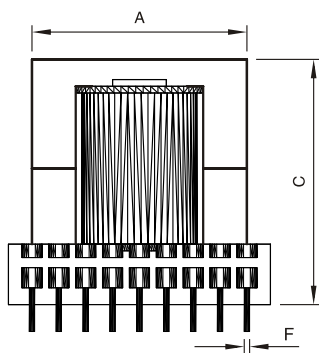
ELECTRICAL CHARACTERISTICS

Part No.	Type	No. of Terminal pins	Dimensions(mm)						Max. output (VA)
			Max	Max	Max	± 0.3	± 0.5	± 0.1	
			A	B	C	D	E	F	
TER 11.5-A	V	8	14	14	12	2.6	9.0	0.6	3
TER 25-A	V	8	27	22	28	5.0	12.5	0.8	87
TER 25-B	V	10	27	22	28	5.0	15.0	0.8	87
TER 28-A	H	20	35	32	25	2.54	28.0	0.5	203
TER 25-B	H	12	31	32	25	5.0	25.0	0.8	203
TER 28-C	V	10	27	25	32	5.0	17.3	0.8	203
TER 28-D	V	12	32	28	32	4.9	22.0	0.6	203
TERL 28-A	V	10	32	25	36	5.0	17.5	0.8	228
TERL 28-B	V	12	32	25	38	5.0	17.5	0.8	228
TERL 28-C	V	12	32	25	36	5.0	20.2	0.8	228
TERL 28-D	V	18	30	25	38	4.0	20.0	0.8	228
TERL 28-E	V	10	30	25	38	5.0	17.5	0.8	228
TERL 28-F	V	14	32	28	38	5.0	20.0	0.8	228
TERL 28-G	H	11	36	38	26	5.0	25.5	0.8	228
TERL 28-H	H	12	32	38	28	5.0	30.4	0.8	228
TER 33-A	V	14	37	31	40	5.0	25.0	1.0	235
TER 33-B	V	14	37	29	40	5.0	22.5	1.0	235
TER 34-A	V	14	36	29	40	5.0	22.3	1.0	240
TER 35-A	V	12	38	30	46	5.0	22.5	1.0	325
TER 35-B	V	14	37	30	44	5.0	22.5	1.0	325
TER 35-C	V	16	41	30	46	5.0	22.55	1.0	325

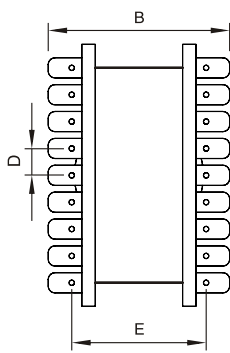
Part No.	Type	No. of Terminal pins	Dimensions(mm)						Max. output (VA)
			Max	Max	Max	± 0.3	± 0.5	± 0.1	
			A	B	C	D	E	F	
TER 35-D	H	16	41	45	29	5.0	35.0	1.0	325
TER 35-E	H	12	38	45	27	5.3	37.1	1.0	325
TER 35-F	H	12	45	37	30	5.4	37.1	1.0	325
TER 39-A	V	16	44	32	53	5.0	25.0	1.0	370
TER 39-B	V	14	40	32	54	5.0	25.2	1.0	370
TER 39-C	V	18	45	32	53	5.0	25.0	1.0	370
TER 39-D	H	16	43	45	35	5.0	30.6	1.0	370
TER 39-E	H	16	43	47	35	5.0	35.3	1.0	370
TER 40-A	V	16	42	33	51	5.0	25.2	1.0	421
TER 40-B	V	16	42	34	52	5.0	27.5	1.0	421
TER 40-C	V	12	42	33	48	5.0	25.0	1.0	421
TER 40-D	H	16	42	50	37	5.0	35.2	1.0	421
TER 42-A	V	18	47	33	47	5.0	27.4	1.0	433
TER 42-B	V	14	44	32	49	5.0	24.8	1.0	433
TER 42-C	V	18	47	39	52	5.0	30.2	1.0	509
TER 42-D	H	14	45	45	36	5.0	34.8	1.0	509
TER 49-A	V	22	55	37	62	5.0	27.5	1.0	680
TER 49-B	V	18	52	38	57	5.0	27.5	1.0	680
TER 49-C	V	20	55	41	60	5.0	32.5	1.0	680
TER 53-A	V	18	55	41	55	5.0	32.5	1.0	800
TER 54-B	V	18	60	42	60	5.0	32.0	1.0	850

Note: The output power is only for forward model and the frequency at 100kHz

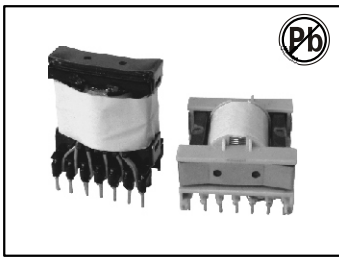
PHYSICAL CHARACTERISTICS



Type V



Type H



SWITCHING TRANSFORMERS TETD SERIES

FEATURES:

- Centre section of the core is round easily design high-power switch transformers

OPTIONS:

- Bulk packaging is standard
- Custom design available

COMMON APPLICATIONS:

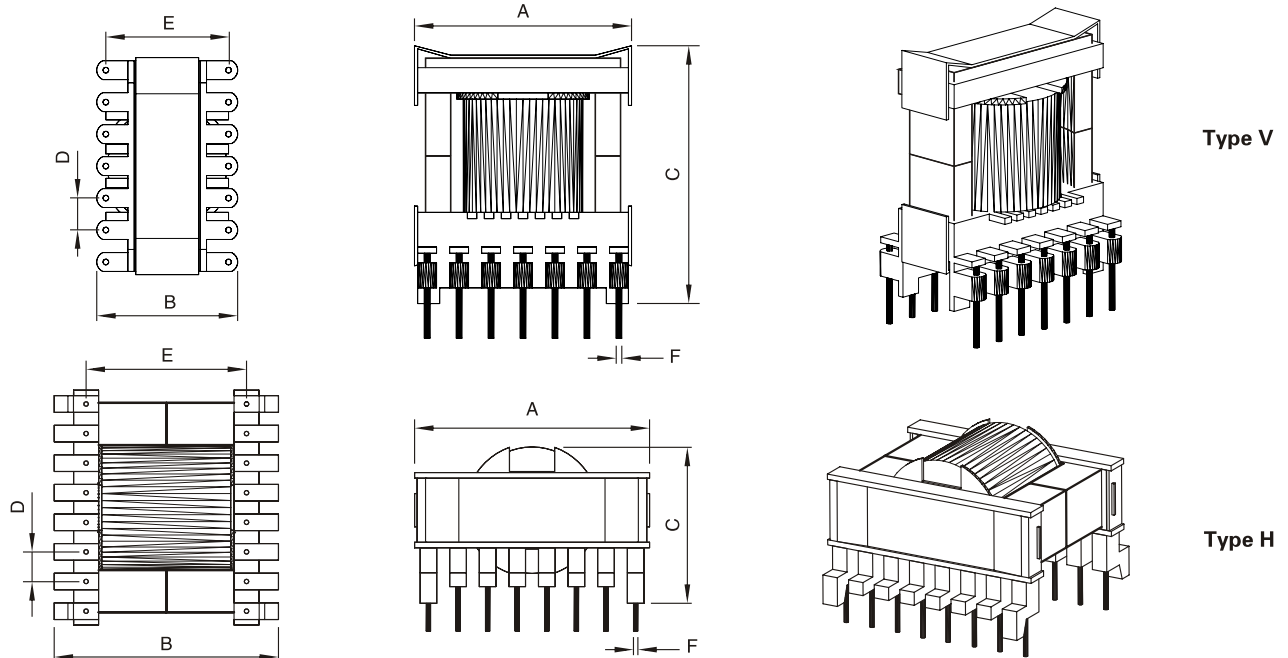
- Drive transformers
- Main transformers
- Smoothing chokes
- General purpose use

ELECTRICAL CHARACTERISTICS

Part No.	Type	No. of Terminal pins	Dimensions(mm)						Max. output (VA)
			Max A	Max B	Max C	± 0.3 D	± 0.5 E	± 0.1 F	
TETD 24-A	V	12	36.5	25.0	38.0	5.08	17.8	1.1	110
TETD 29-A	H	14	36.0	36.0	25.5	5.0	25.6	0.8	170
TETD 29-B	H	13	37.0	37.0	27.0	5.0	25.8	0.8	170
TETD 29-C	V	12	42.0	24.5	43.0	5.08	20.32	0.8	170
TETD 34-A	V	12	34.5	30.0	37.0	5.0	25.5	1.0	270
TETD 34-B	H	14	41.0	41.0	27.0	5.0	25.5	2.0	270
TETD 34-C	V	14	39.0	28.0	45.0	5.0	22.9	1.0	270
TETD 39-A	V	16	46.0	30.5	49.6	5.0	25.4	1.0	380
TETD 39-B	H	16	45.0	45.0	36.0	5.0	30.2	1.0	380
TETD 44-A	H	18	50.0	51.0	40.0	5.0	35.8	1.0	520
TETD 44-B	V	18	46.0	33.0	51.0	5.0	27.5	1.0	520
TETD 49-A	V	22	55.0	37.0	55.0	5.0	27.5	1.0	680
TETD 49-B	H	20	56.0	55.0	41.0	5.0	40.4	1.0	680
TETD 54-A	H	22	61.0	60.0	47.0	5.0	44.8	1.0	750
TETD 59-A	H	24	68.0	68.0	52.5	5.0	51.0	1.0	900

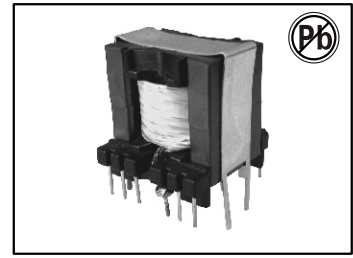
Note: The output power is only for forward model and the frequency at 100kHz

PHYSICAL CHARACTERISTICS



SWITCHING TRANSFORMERS

TPQ SERIES



FEATURES:

- Design in the fittest shape
- Applied in the power: (50W-1kW)100kHz
- Cut down installation cubage with multi-pluge and boobins, easily wire connection to meet the request
- Low leakage

OPTIONS:

- Bulk packaging is standard
- Custom design available

COMMON APPLICATIONS:

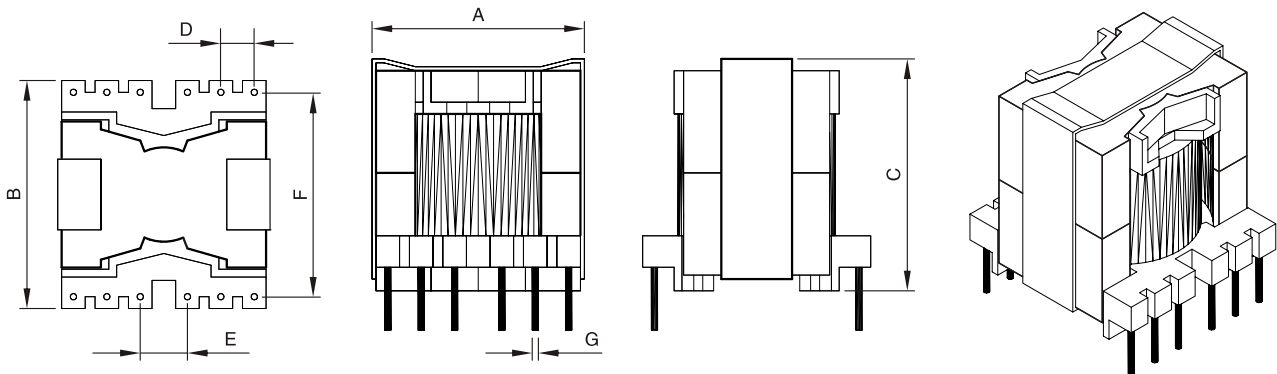
- Drive transformers
- Main transformers
- Smoothing chokes
- Switching power supplies
- AC-DC, DC-DC converters

ELECTRICAL CHARACTERISTICS

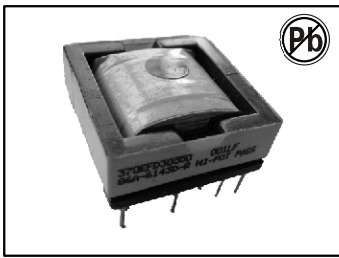
Part No.	Type	No. of Terminal pins	Dimensions(mm)							Max. output (VA)
			Max	Max	Max	± 0.3	± 0.4	± 0.5	± 0.1	
			A	B	C	D	E	F	G	
TPQ 2020-A	V	14(6+8)	24.0	24.0	22.0	3.8/2.5	5.1	20.3	0.6	92
TPQ 2620-A	V	12	28.0	32.0	22.0	3.8	7.6	25.4	0.6	170
TPQ 2620-B	V	12	28.0	32.0	21.0	3.8	7.6	25.4	0.6	170
TPQ 2625-A	V	12	28.5	31.0	28.0	3.8	7.5	25.5	0.7	195
TPQ 3220-A	V	12	33.0	35.0	24.0	5.0	7.5	30.0	0.8	232
TPQ 3220-B	V	12	33.0	36.0	22.0	5.1	7.6	30.5	0.8	232
TPQ 3225-A	V	12	35.5	35.0	27.0	5.0	7.4	30.0	0.8	280
TPQ 3230-A	V	12	33.0	36.0	32.0	5.05	7.6	30.3	0.8	331
TPQ 3535-A	V	12	37.0	41.0	38.5	5.0	10.0	35.0	0.8	452
TPQ 4040-A	V	12	41.0	44.0	43.0	5.0	15.1	38.0	0.8	596
TPQ 5050-A	V	12	52.0	53.0	54.0	7.62	15.24	45.72	1.2	1045

Note: The output power is only for forward model and the frequency at 100kHz

PHYSICAL CHARACTERISTICS



Type V



SWITCHING TRANSFORMERS TEFD SERIES

FEATURES:

- Horizontal installation
- Multi out-put applied in denseness installation

OPTIONS:

- Bulk packaging is standard
- Custom design available

COMMON APPLICATIONS:

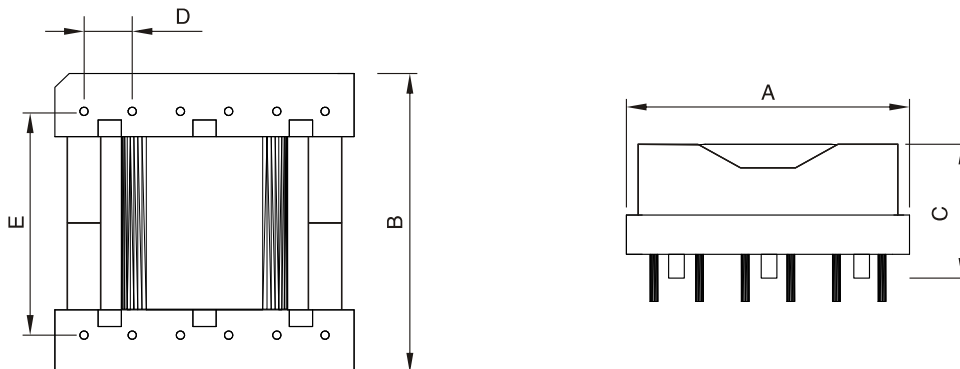
- Drive transformers
- Main transformers
- Smoothing chokes
- General purpose use
- Switching power supplies
- AC-DC, DC-DC converters

ELECTRICAL CHARACTERISTICS

Part No.	Type	No. of Terminal pins	Dimensions(mm)						Max. output (VA)
			Max	Max	Max	± 0.3	± 0.5	± 0.1	
			A	B	C	D	E	F	
TEFD 15-A	H	8	17	18	9.5	3.7	13.7	0.6	5
TEFD 15-B	H	8	17	18	9.5	3.75	13.75	0.6	5
TEFD 15-C	H	8	17	18	9.5	3.8	13.7	0.6	5
TEFD 20-A	H	8	22	23	11.0	5.0	17.5	0.6	18
TEFD 20-B	H	9	22	23	11.0	5.0	17.5	0.6	18
TEFD 20-C	H	10	22	26	15.0	3.8	23.8	0.6	18
TEFD 25-A	H	10	27	28	13.0	5.0	22.45	0.8	45
TEFD 25-B	H	10	27	28	15.0	5.0	22.5	0.8	45
TEFD 30-A	H	12	32	33	14.0	5.0	27.4	0.8	70
TEFD 30-B	H	12	32	36	18.0	5.0	30.0	0.8	70
TEFD 30-C	H	12	32	37	14.0	5.0	32.0	0.8	70

Note: The output power is only for forward model and the frequency at 100kHz

PHYSICAL CHARACTERISTICS



Type H

SMD LOW PROFILE SWITCHING TRANSFORMER

STEFD SERIES



FEATURES:

- Multiple Combination
- Series Mode or Parallel Mode
- Low Profile

COMMON APPLICATIONS:

- SMPS DC-DC converter
- CMC, Differential
- Flyback, Boost, Buck
- ADSL/VDSL
- Switching power supplier

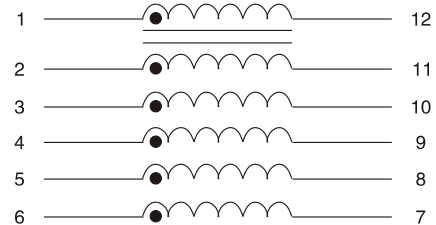
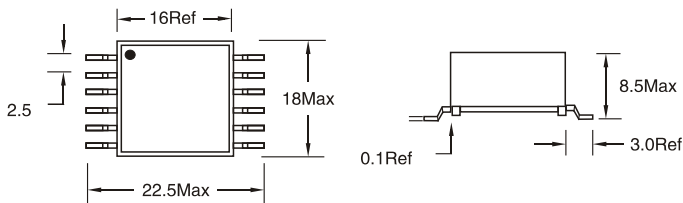
STANDARD SPECIFICATIONS @25°C

Part Number		L (μH) ± 20%	Leakage (μH) Typ.	DCR Max (Ω) Max	1rms Typ (mA) Typ.
EFD15	STEFD15-3R8	3.8	0.06	0.07	1.5
	STEFD15-4R5	4.5	0.06	0.07	1.5
	STEFD15-6R8	6.8	0.06	0.07	1.5
	STEFD15-110	11.3	0.06	0.07	1.5
	STEFD15-630	63	0.06	0.07	1.5
EFD20	STEFD20-3R5	3.5	0.11	0.05	2.1
	STEFD20-4R5	4.5	0.11	0.05	2.1
	STEFD20-5R3	5.3	0.11	0.05	2.1
	STEFD20-100	10	0.11	0.05	2.1
	STEFD20-770	77	0.11	0.05	2.1

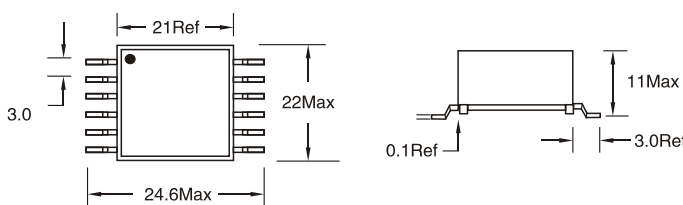
TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS

Dimensions:mm

STEFD15



STEFD20



- Inductance measure at Pin 1-2,100KHz 0.1VRms.
- DCR measure at individual winding
- Leakage measure at pin 1-12 with all other windings shorted
- Insulation Resistance: 500 VDC,1KM Ohm min.
- Turns ratio: 1:1:1:1:1:1
- Soldering temperature:260°C for 4 ± 1 seconds
- Operating temperature:0°C to 70°C
- Storage Temperature:-25°C to 85°C
- Different package available per special request

Note:All specifications subject to change without notice.