

# SMT HIGH CURRENT PLANAR INDUCTORS

## FAPE20 SERIES

### FEATURES:

- High Thermal Efficiency & Energy Storage
- High Current Rating Up to 73 Amps
- Lower Profile of 7.4mm Max
- Wider Flexibility of Inductances
- Footprint 23.50mm x 19.50mm
- Operating Temperature -40°C to +130°C

### OPTIONS:

- Weight: 11.8 grams
- Tape & Reel: 250/reel
- Tube: 18/tube

### COMMON APPLICATIONS:

- High density and high energy efficiency.
- High current DC/DC power supplies high current.
- The main windings inductor serves as an output choke, While the auxiliary windings controls, Input current to the PM(TI25S1604).
- Telecommunications, industrial control systems,
- Automotive and heavy equipment vehicle systems

### ELECTRICAL CHARACTERISTICS:

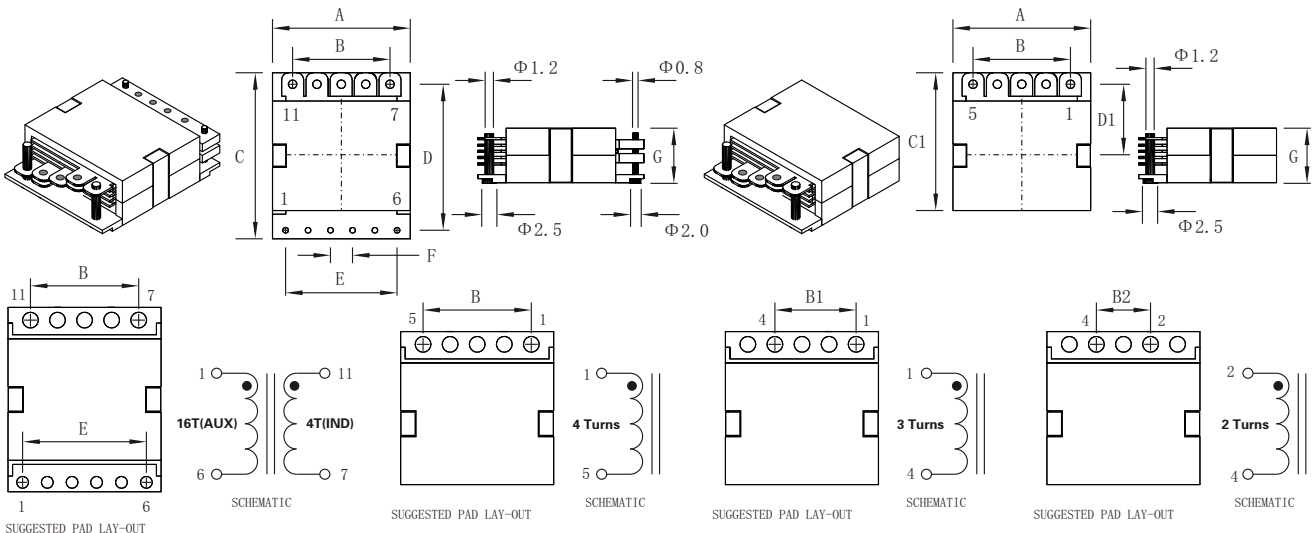
Part Number	Inductance @ 0 A dc (uH ± 10%)	Inductance @ IDC rated (uH ± 15%)	IDC rated A dc	DCR (mΩ)Max		Turns Ratio		Main Aux. Hi-pot	IDC saturation (Amps)		IDC heating (Amps)
				Main	Aux.	Main	Aux.		@25°C	@100°C	
FAPE 20S1604	2.10	2.00	30.0	2.00	1500	4	16	1500	45	40	37.0
<b>2/1/2 Turns</b>											
FAPE 20D221	0.46	0.45	73.0	0.40	N/A	2	N/A	N/A	95	80	73
FAPE 20D222	0.67	0.63	55.0	0.40	N/A	2	N/A	N/A	63	53	73
FAPE 20D223	0.90	0.85	39.0	0.40	N/A	2	N/A	N/A	46	37	73
FAPE 20D224	1.12	1.05	30.0	0.40	N/A	2	N/A	N/A	35	30	73
FAPE 20D225	1.35	1.25	25.0	0.40	N/A	2	N/A	N/A	29	26	73
FAPE 20D226	1.56	1.45	21.0	0.40	N/A	2	N/A	N/A	24	22	73
<b>2 Turns</b>											
FAPE 20S121	0.46	0.45	53.0	0.8	N/A	2	N/A	N/A	95	80	52
FAPE 20S122	0.67	0.63	52.0	0.8	N/A	2	N/A	N/A	63	53	52
FAPE 20S123	0.90	0.85	39.0	0.8	N/A	2	N/A	N/A	46	37	52
FAPE 20S124	1.12	1.05	30.0	0.8	N/A	2	N/A	N/A	35	30	52
FAPE 20S125	1.35	1.25	26.0	0.8	N/A	2	N/A	N/A	29	26	52
FAPE 20S126	1.56	1.45	22.0	0.8	N/A	2	N/A	N/A	24	22	52
<b>3 Turns</b>											
FAPE 20S131	1.00	0.95	42.0	1.20	N/A	3	N/A	N/A	68	54	42
FAPE 20S132	1.50	1.45	36.0	1.20	N/A	3	N/A	N/A	43	35	42
FAPE 20S133	2.00	1.95	25.0	1.20	N/A	3	N/A	N/A	29	25	42
FAPE 20S134	2.50	2.45	20.0	1.20	N/A	3	N/A	N/A	23	21	42
FAPE 20S135	3.00	2.85	15.0	1.20	N/A	3	N/A	N/A	18	16	42
FAPE 20S136	3.50	3.45	12.0	1.20	N/A	3	N/A	N/A	15	13	42
<b>4 Turns</b>											
FAPE 20S141	1.78	1.65	37.0	1.60	N/A	4	N/A	N/A	55	43	37
FAPE 20S142	2.66	2.45	30.0	1.60	N/A	4	N/A	N/A	35	27	37
FAPE 20S143	3.55	3.35	17.0	1.60	N/A	4	N/A	N/A	20	18	37
FAPE 20S144	4.45	4.00	14.0	1.60	N/A	4	N/A	N/A	16	15	37
FAPE 20S145	5.33	4.85	11.0	1.60	N/A	4	N/A	N/A	13	12	37
FAPE 20S146	6.21	5.80	9.0	1.60	N/A	4	N/A	N/A	11	10	37

### TECHNICAL INFORMATION

- Inductance of FAPE 20s1604 measured on Agilent/HP4284 between pins 7 & 11 at 100kHz, 0.1 Vrms.
- The IDC rated is either 85% of the IDC saturation or the IDC heating depending which is lower.
- The IDC saturation is the current which causes the inductance to drop by 15% of its nominal value.
- The IDC heating is the current which causes the temperature of the part to increase by approximately 45°C.

Note: All specifications subject to change without notice.

### PHYSICAL CHARACTERISTICS



#### Dimensions

A	B	B1	B2	C	C1	D	D1	E	F	G
19.5MAX	12.70	9.53	6.35	23.5MAX	19.5	20.32	9.91	15.75	4.57	7.40MAX