

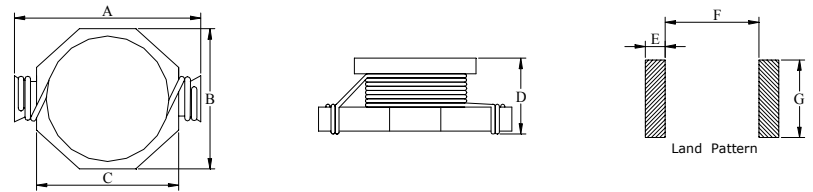
# TBRH TYPE SMD POWER INDUCTOR



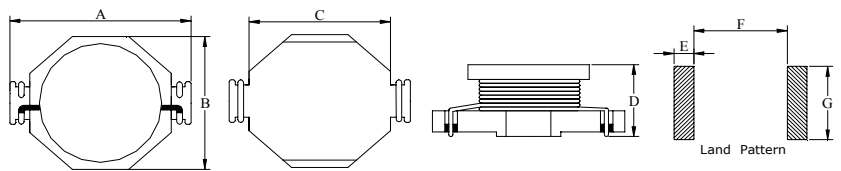
### FEATURE:

- Maximum power density.
- Low resistance and self-leaded construction.
- High current low voltage applications.
- Miniature surface mount design.

### SHAPES&DIMENSION FOR TBRH1813 SERIES Unit:mm



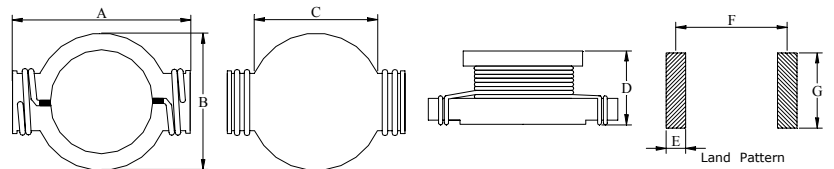
### SHAPES&DIMENSION FOR TBRH3316 SERIES Unit:mm



### APPLICATION

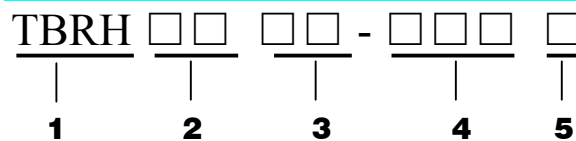
- Small cell phones
- PDAS(desktop)
- Pagers
- Flash memory programmers
- Notebook computers
- Battery chargers
- DC-DC converters
- Network cards
- Switching boards
- Industrial electronics
- Entertainment electronic devices

### SHAPES&DIMENSION FOR TBRH5022 SERIES Unit:mm

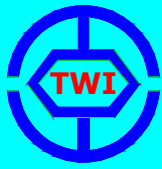


Part No.	A	B	C	D	E	F	G
TBRH1813	9.10MAX	6.10MAX	5.84TYP	5.0MAX	1.91	5.08	4.06
TBRH3316	13.21MAX	9.91MAX	9.14MIN	6.35MAX	1.52	8.64	4.06
TBRH5022	22.35MAX	16.26MAX	14.25MAX	8.00MAX	3.18	17.53	8.64

### PART NUMBERING SYSTEM:



- 1) PRODUCT SYMBOL
- 2) OUTSIDE DIA :m/m
- 3) BODY HEIGHT :m/m
- 4) INDUCTANCE :μH
- 5) TOLERANCE :K 10%, L 15%, M 20%

**TBRH TYPE****SMD POWER INDUCTOR****STANDARD SPECIFICATION**

Part Inductance		DCR( $\Omega$ )Max.			Rated D.C Current(A)Max.		
No.	L( $\mu$ H) $\pm$ 20%	TBRH 1813	TBRH 3316	TBRH 5022	TBRH <sup>4</sup> 1813	TBRH <sup>5</sup> 3316	TBRH <sup>5</sup> 5022
R18	0.18	0.003			14.00		
R33	0.33	0.004	0.002		10.00	20.0	
R56	0.56	0.010			7.70		
R68	0.68		0.005			13.0	
R78	0.78			0.0026			30.0
1R0	1.00		0.006			11.0	
1R2	1.20	0.017			5.30		
1R5	1.50		0.008	0.0040		9.0	25.0
2R2	2.20	0.035	0.011	0.0061	3.50	7.8	20.0
2R7	2.70		0.012			7.0	
3R3	3.30	0.040	0.014	0.0086	3.00	6.4	17.0
3R9	3.90			0.0100			15.0
4R7	4.70	0.054	0.018	0.0140	2.60	5.4	13.0
6R0	6.00			0.0170			12.0
6R8	6.80	0.080			2.20		
7R8	7.80			0.0180			11.0
100	10.0	0.110		0.0260	1.90		10.0
150	15.0	0.170		0.0320	1.50		8.0
220	22.0	0.250			1.20		
330	33.0	0.350			0.99		
470	47.0	0.470			0.87		

1. Test Freq(L): 100KHz 0.25V;

2. Tolerance of Inductance: 0.18~47 $\mu$ H $\pm$ 20%(M);

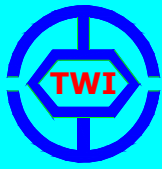
3. Operating temperature -40 $^{\circ}$ C to +85 $^{\circ}$ C.

4. TBRH1813 Series Isat is peak current for approximately 30% roll-off.

5. TBRH3316/5022 Series DC current at which the inductance drops 10%(typ) from its value without current;

6. Rms current to for a 40 $^{\circ}$ C rise above 25 $^{\circ}$ C ambient;

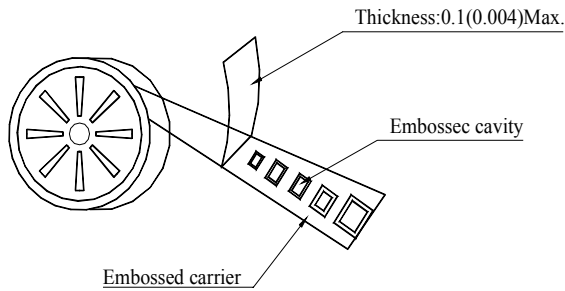
7. Electrical specifications at 25 $^{\circ}$ C;



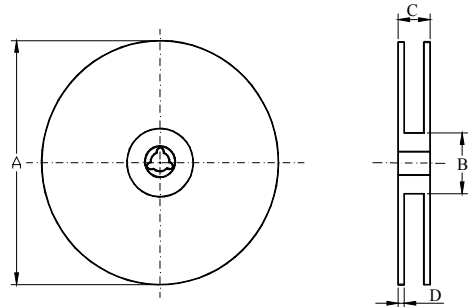
# TBRH TYPE

## SMD POWER INDUCTOR

### PACKAGING FOR SMC



### CARRIER TAPE REELS

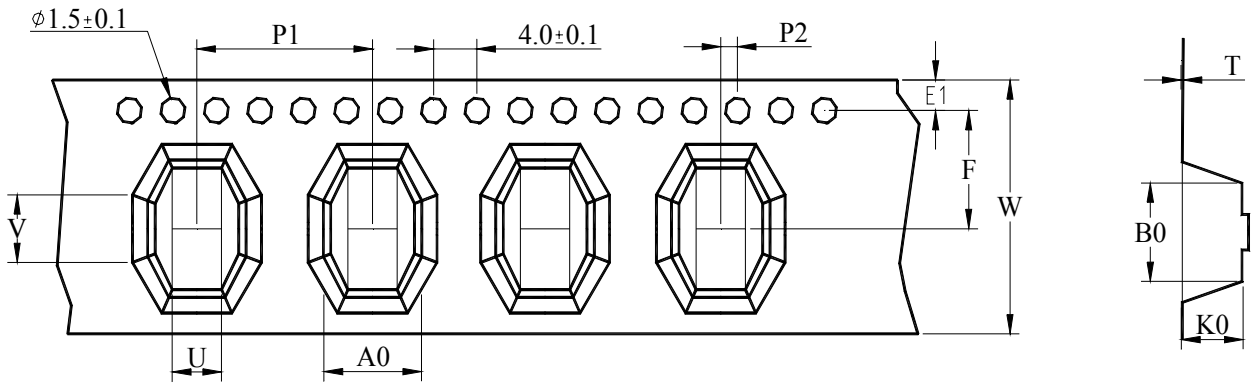


### REEL DIMENSION

Dimension in mm

Part No.	TYPE	A	B	C	D	PCS/REEL
TBRH1813	16 mm	330±2	100±1	22.4±1	2.0±0.5	1000
TBRH3316	24 mm	330±2	100±1	30.4±1	3.0±0.5	750
TBRH5022	44 mm	330±2	100±1	50.0±1	3.0±0.5	250

### TAPE DIMENSION/PACKAGING



### TAPE DIMENSION

Dimension in mm

Part No.	A0	B0	K0	P1	P2	U	V	E1	F	W	T
TBRH1813	8.5	9.2	5.6	12	2	1.44	1.34	1.75	5.5	16	0.30
TBRH3316	10.2	16.50	5.1	12	2	4.8	4.30	1.75	11.5	24	0.30
TBRH5022	18.0	22.65	8.0	24	2	4.8	4.30	1.75	11.5	44	0.30