

# TCA TYPE

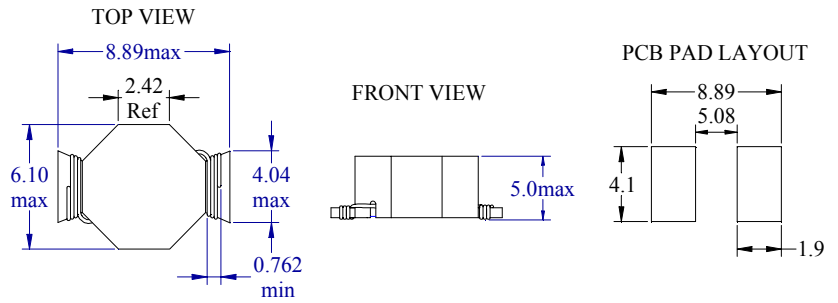
## SMD POWER INDUCTOR



### FEATURE:

- Miniature surface mount design;
- Ideal for applications requiring low inductance, and high current in a miniature package;
- Protective case eliminates core breakage;
- Meet UL 94V-0 flammability standard;

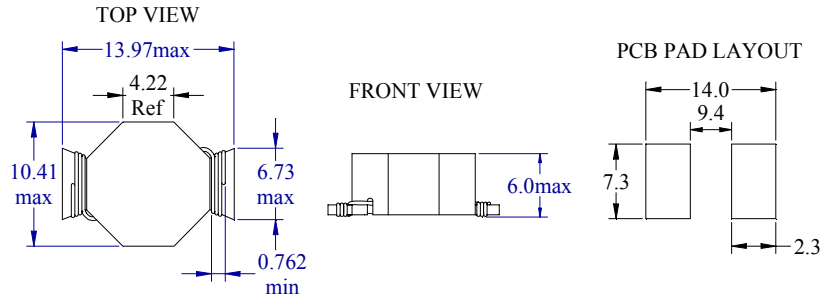
### SHAPES&DIMENSION FOR TCA2016 SERIES: Unit:mm



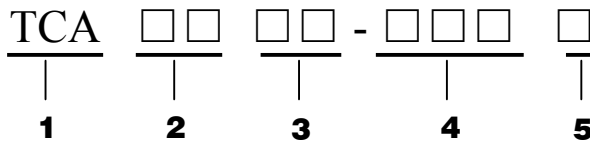
### APPLICATION

- DC/DC converter
- Switching regulators
- Power amplifiers
- Power supplies

### SHAPES&DIMENSION FOR TCA3316 SERIES: Unit:mm



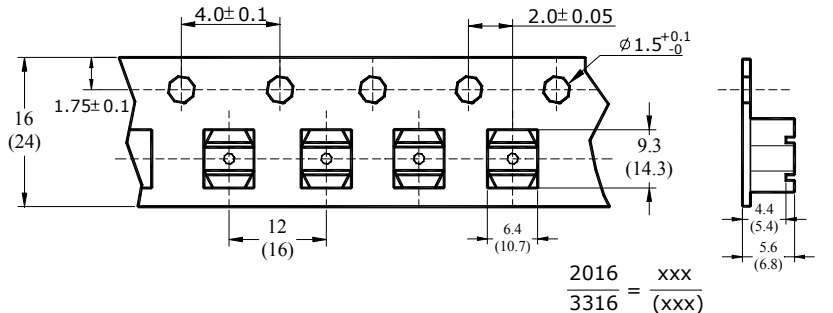
### PART NUMBERING SYSTEM:



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

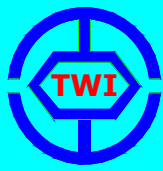
### TCA SERIES PACKAGING

Unit:mm



Direction of feed →

Parts packaged on 13" Diameter reel, 900(550) parts per reel.

**TCA TYPE****SMD POWER INDUCTOR****STANDARD SPECIFICATION**

Part Inductance		OCL( $\mu$ H) <sup>(1)</sup>		DCR( $\Omega$ )Max. <sup>(2)</sup>		I <sub>RMS</sub> (A) <sup>(3)</sup>		I <sub>SAT</sub> (A) <sup>(4)</sup>	
No.	L( $\mu$ H)	TCA 2016	TCA 3316	TCA 2016	TCA 3316	TCA 2016	TCA 3316	TCA 2016	TCA 3316
R47	0.47	0.569	0.595	0.0097	0.0049	6.0	10.6	7.7	11.4
1R0	1.0	1.20	1.00	0.0177	0.0065	4.4	9.3	5.3	9.9
1R5	1.5	1.61	1.46	0.0200	0.0081	4.2	8.3	4.5	7.9
2R2	2.2	2.62	2.56	0.0363	0.0107	3.1	7.2	3.5	6.1
3R3	3.3	3.79	3.23	0.0428	0.0128	2.9	6.5	3.0	5.1
4R7	4.7	5.15	4.77	0.0544	0.0165	2.2	5.5	2.6	4.2
6R8	6.8	6.87	6.63	0.0897	0.0202	1.7	5.0	2.2	3.6
100	10	11.00	9.73	0.1107	0.0267	1.5	4.3	1.9	3.3
150	15	16.00	15.43	0.1747	0.0410	1.2	3.5	1.5	2.4
220	22	23.50	22.50	0.2541	0.0617	1.0	2.8	1.2	2.0
330	33	36.00	33.13	0.3670	0.0917	0.82	2.1	0.99	1.7
470	47	48.50	48.65	0.4740	0.1388	0.72	1.7	0.87	1.4
680	68	73.52	68.17	0.7320	0.1787	0.58	1.5	0.67	1.2
820	82		84.1		0.2235		1.34		1.03
101	100	112.67	102.6	1.11	0.2707	0.47	1.2	0.53	0.95
151	150	152.40	150	1.61	0.4100	0.40	1.0	0.46	0.77
221	220	223.10	223	1.96	0.6717	0.36	0.773	0.38	0.637
331	330	331.90	338	3.10	0.8783	0.28	0.676	0.31	0.510
471	470		471		1.31		0.553		0.427
681	680		700		1.97		1.97		0.355
821	820		823		2.24		2.24		0.334
102	1000		1005		2.96		2.96		0.300

1.Open circuit inductance test parameters:100KHz, 0.25Vrms,0Adc;

2.DCR limits 20°C;

3.RMS current for an approximate  $\Delta t$  of 40°C.at an ambient temperature of 85°C.

4.Peak current for approximately 10% rolloff.

5.Tolerance of Inductance: 0.47~1000 $\mu$ H $\pm$ 20%(M);

6.Electrical specifications at 25°C;