

# TRANSFORMER FOR DC/DC AUTOMOTIVE APPLICATIONS



## A2003 SERIES



- AEC-Q200 Qualified for Automotive Applications
- High Q Value and Low Leakage Inductance
- Good temperature stability ensures small variation in inductance
- Low profile, surface mount design
- Metal cover improves EMI shielding
- Operating Temperature: -40°C to +85°C
- Custom Design Available

### ELECTRICAL PARAMETERS @ 25°C

Part Number A2003-	Inductance (mH) (4-6)	Leakage Inductance (µH Max) (4-6)	Testing Frequency (kHz) 1V	Turns Ratio (±2%) (3-2 : 2-1 : 4-6)	DCR (Ω ±20%)		
					(4-6)	(3-2)	(2-1)
192	1.93±8%	150	58	1 : 1 : 8	15.1	0.62	0.66
192A	1.93±8%	150	58	1 : 1 : 9	17.1	0.63	0.65
212	2.10±8%	150	52	1 : 10	18.2	0.63	(3-1)
222	2.15±8%	150	58	1 : 1 : 8	15.1	0.62	0.66
222A	2.15±8%	150	58	1 : 1 : 9	17.1	0.63	0.65
222B	2.15±8%	150	58	1 : 1 : 10	19.2	0.60	0.63
232	2.30±8%	150	48	1 : 1 : 10	19.2	0.60	0.63
232A	2.30±8%	150	58	1 : 10	18.2	0.62	(3-1)
242	2.40±8%	150	58	1 : 10	18.2	0.62	(3-1)
242A	2.40±8%	150	58	1 : 1 : 7	17.5	0.80	0.85
272	2.70±8%	150	58	1 : 1 : 7	17.5	0.80	0.85
272A	2.70±8%	150	58	1 : 1 : 8	20.0	0.80	0.84
318	3.18±8%	150	52	1 : 1 : 11.75	23.0	0.60	0.63
318A	3.18±8%	150	52	1 : 11.75	21.5	0.63	(3-1)
318B	3.18±8%	150	52	1 : 1 : 10	19.2	0.60	0.63
318C	3.18±8%	150	58	1 : 1 : 8.3	21.0	0.77	0.84
318D	3.18±8%	150	58	1 : 1 : 7.8	18.0	1.23	1.29
318E	3.18±15%	150	58	1 : 1 : 7	16.0	1.23	1.29
318F	3.18±8%	150	52	1 : 1 : 15	24.0	0.50	0.53
318G	3.18±8%	150	52	1 : 1 : 14.1	22.8	0.51	0.53
352	3.50±8%	150	52	1 : 1 : 12.5	24.6	0.61	0.65
362	3.60±8%	150	52	1 : 10	20.0	0.67	(3-1)
362A	3.60±8%	150	52	1 : 15	23.5	0.52	(3-1)
382	3.76±8%	150	58	1 : 1 : 9	23.0	0.80	0.85
392	3.90±8%	150	52	1 : 1 : 11.75	23.0	0.60	0.63

Product performance is limited to specified parameters. Data is subject to change without prior notice.

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# TRANSFORMER FOR DC/DC



## A2003 SERIES

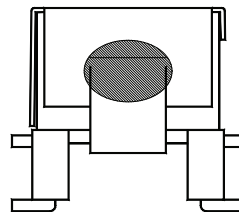
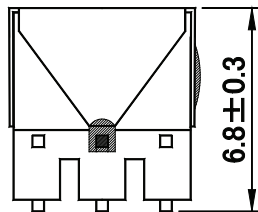
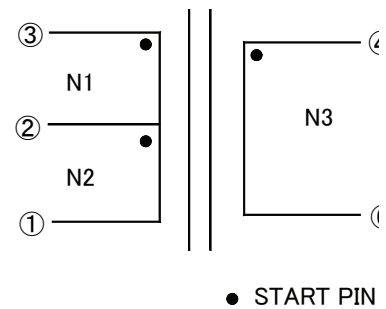
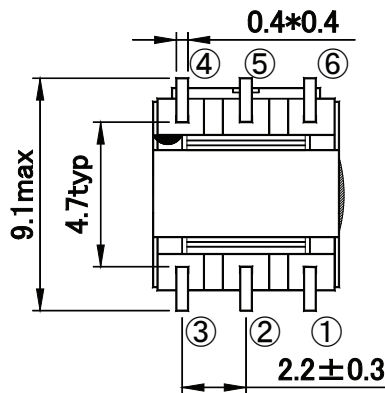
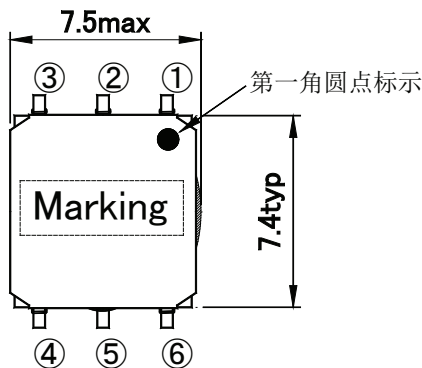
### ELECTRICAL PARAMETERS @ 25°C

Part Number A2003-	Inductance (mH) (4-6)	Leakage Inductance ( $\mu$ H Max) (4-6)	Testing Frequency (kHz) 1V	Turns Ratio ( $\pm 2\%$ ) (3-2 : 2-1 : 4-6)	DCR ( $\Omega \pm 20\%$ )		
					(4-6)	(3-2)	(2-1)
412	4.10 $\pm 8\%$	150	52	1 : 1 : 11.75	23.0	0.60	0.63
432	4.30 $\pm 8\%$	150	52	1 : 1 : 11.75	23.0	0.60	0.63
472	4.70 $\pm 8\%$	150	52	1 : 1 : 11.75	23.0	0.60	0.63
502	5.00 $\pm 8\%$	150	58	1 : 1 : 15	35.6	0.61	0.64
502A	5.00 $\pm 8\%$	150	40	1 : 1 : 15	35.6	0.61	0.64
502B	5.00 $\pm 8\%$	150	52	1 : 1 : 20	29.3	0.45	0.47
512	5.10 $\pm 8\%$	150	52	1 : 1 : 11.75	27.3	0.72	0.76
552	5.50 $\pm 8\%$	150	52	1 : 1 : 8	26.5	2.80	2.90
552A	5.50 $\pm 8\%$	150	52	1 : 1 : 11.75	27.3	1.21	1.26
802	8.00 $\pm 15\%$	150	40	1 : 1 : 10	24.5	0.75	0.80

NOTES:

- Primary Leakage L Measured with Secondary Winding Shorted
- Hi-pot: 250Vdc, 1mA, 60 Sec or 300Vdc, 1mA, 2 Sec (Pri to Sec)

### DIMENSIONS (mm)



**Dimensions**

Unless otherwise specified, all tolerances are:

inch: .XX :  $\pm 0.015$  .XXX :  $\pm 0.004$

mm: X.X :  $\pm 0.38$  X,XX :  $\pm 0.10$

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