

REVISIONS

REV.	DESCRIPTION	ECN NO.	DATE
01	FIRST RELEASE	N/A	05/19/16

Automotive Application

When ordering, please add suffix "T" to the part number for tape & reel packaging(13" reel).

PAGE 5 IS FOR INTERNAL ONLY

PART NUMBER	PART DESCRIPTION
ARIS1375B-xxxyF	RoHS compliant per EU Directive 2011/65/EU

TITLE	POWER INDUCTOR, SMD, 2 PIN
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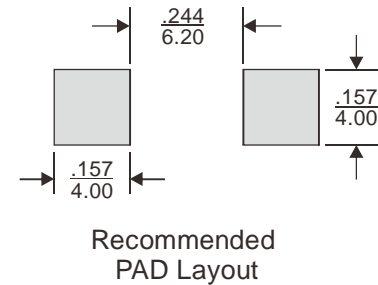
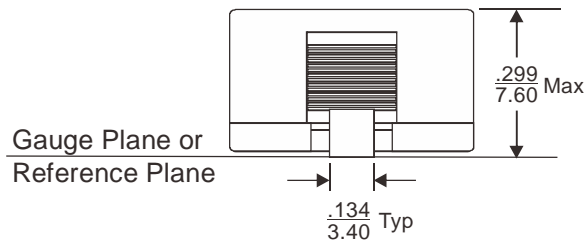
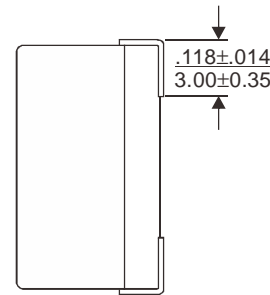
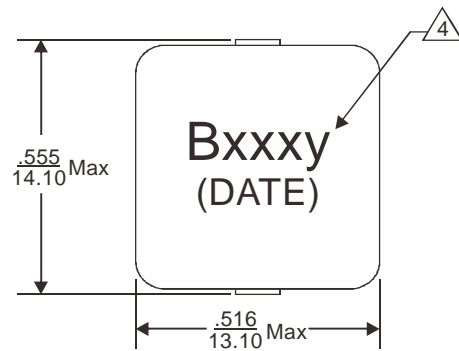
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCH/mm.

TOLERANCE ARE:

INCH	mm	ANGLE
.XXX ± .005	.XX ± .13	X.X ± 0.3
.XX ± .02	.X ± .5	X. ± 1

APPROVALS	DATE
DRAWN BY J. FENG	05/19/16
PROJ. ENG J. FENG	05/19/16
APPROVED BY J. YANG	05/19/16
Q.A. D. LUO	05/19/16

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1. Dimensions are specified in $\frac{\text{inches}}{\text{mm}}$ with higher precedence in mm.
2. Unless otherwise specified, all tolerances are $\pm \frac{.010}{0.25}$.
3. Coplanarity: $\frac{.004}{0.10}$ maximum.
4. Marking "Bxxxy" is the inductance code which is described in page 3.
5. "(DATE)" includes at least the manufacturing date code (in YWW format) plus manufacturing site code.

MECHANICAL OUTLINE



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ELECTRICAL SPECIFICATION @25°C:

E&E Part Number ARIS1375B-xxxxyF	Rated Inductance (μ H)	Inductance Tolerances (%) L	DCR (m Ω) Max	\triangle 8	\triangle 9	\triangle 10	Volts- μ Sec (V μ S)Typ	Marking (Bxxxxy)
				Isat 20% rolloff (A)	Isat 30% rolloff (A)	Irms (A)		
ARIS1375B-R20LF	0.20	\pm 15	0.50	65	95	46.7	2.87	BR20L
ARIS1375B-R47LF	0.47	\pm 15	0.88	40	57	33.7	4.78	BR47L
ARIS1375B-1R0LF	1.0	\pm 15	1.87	28	41	23.7	6.70	B1R0L
ARIS1375B-1R5LF	1.5	\pm 15	2.27	22	32	21.0	8.46	B1R5L
ARIS1375B-2R2LF	2.2	\pm 15	3.37	18	26	17.2	10.4	B2R2L
ARIS1375B-3R3LF	3.3	\pm 15	4.87	15	22	14.3	12.4	B3R3L
ARIS1375B-4R3LF	4.3	\pm 15	5.90	13.2	19.1	13.0	14.4	B4R3L
ARIS1375B-6R8LF	6.8	\pm 15	9.40	11.4	15.1	10.3	18.1	B6R8L
ARIS1375B-100LF	10.0	\pm 15	14.0	8.6	12.5	8.50	22.0	B100L
ARIS1375B-220LF	22.0	\pm 15	25.7	6.0	8.7	6.30	31.5	B220L
ARIS1375B-330LF	33.0	\pm 15	48.8	4.8	7.0	4.42	37.3	B330L
ARIS1375B-470LF	47.0	\pm 15	72.3	3.9	5.7	3.65	44.8	B470L

6. Add the tolerance code of inductance by replacing "Y" of the part number with "L".

\triangle 7. Inductance is tested at 100kHz, 1.0Vrms.

\triangle 8. Saturating current, Isat, is the current at which the inductance of the component drops by 20% typical at an ambient temperature of 25°C.

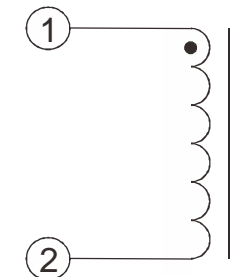
\triangle 9. Saturating current, Isat, is the current at which the inductance of the component drops by 30% typical at an ambient temperature of 25°C.

\triangle 10. Heating current, Irms, is the current required to raise the component temperature by approximately 40°C.


11. Operating frequency range up to 3MHz.

12. Operating temperature range: -40°C to +125°C.

13. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

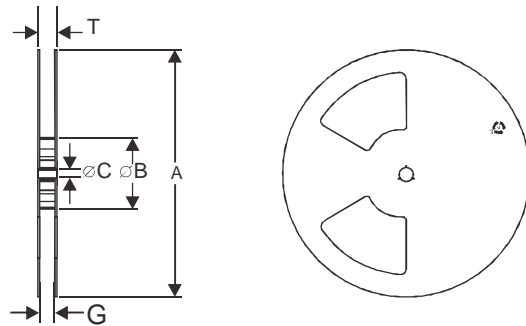


SCHEMATIC

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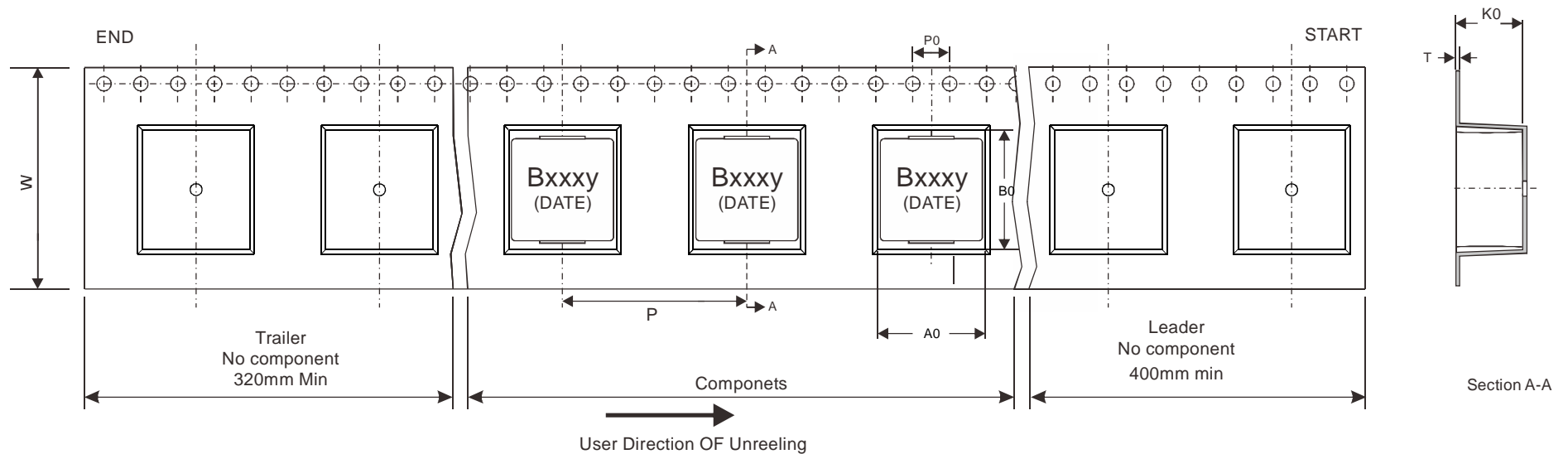
PACKAGING INFORMATION

(1) CONFIGURATION:(mm)



SYMBOL	A	B	C	G	T
DIM	330	100	13	24.4	29.6

(2) TAPE DIMENSIONS:(mm)



SYMBOL	A0	B0	K0	W	P	P0	T
DIM	13.2 _{Typ}	14.2 _{Typ}	7.65 _{Typ}	24.0 ^{+0.30} _{-0.00}	20.0 [±] _{0.10}	4.0 [±] _{0.10}	0.50 _{REF}

(3) Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity)



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