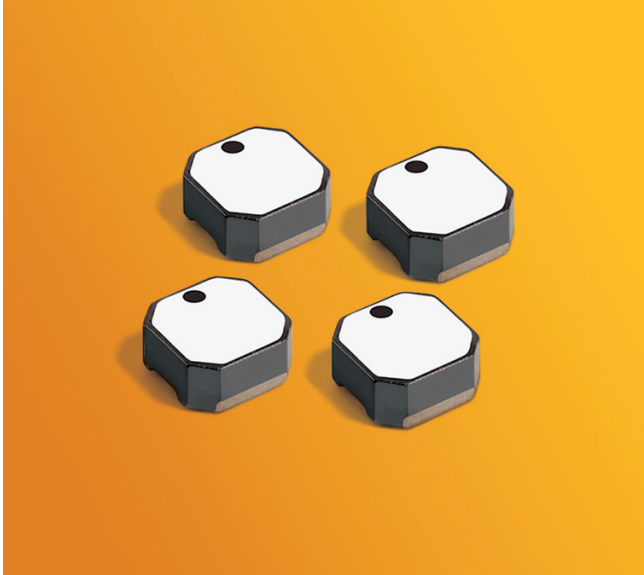


Outgassing Compliant Power Inductors AE425PJB



- High temperature materials allow operation in ambient temperatures up to 155°C
- Passes NASA low outgassing specifications
- Special construction allows it to pass vibration testing to 80 G and shock testing to 1000 G.
- Tin-lead (Sn-Pb) termination for the best possible board adhesion

Core material Ferrite

Terminations Tin-lead (63/37) over tin over nickel.

Weight 54 – 64 mg

Ambient temperature –55°C to +105°C with Irms current, +105°C to +155°C with derated current

Storage temperature Component: –55°C to +155°C.
Packaging: –55°C to +80°C

Resistance to soldering heat Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles

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

Enhanced crush-resistant packaging 1000/7" reel

Plastic tape: 12 mm wide, 0.23 mm thick, 8 mm pocket spacing, 1.9 mm pocket depth

Recommended pick and place nozzle OD: 4 mm; ID: ≤ 2 mm

Part number ¹	Inductance ² (µH)	DCR max ³ (Ohms)	SRF (MHz) ⁴		Isat (A) ⁵			Irms (A) ⁶	
			min	typ	10% drop	20% drop	30% drop	20°C rise	40°C rise
AE425PJB351MSZ	0.35 ±20%	0.040	252	360	5.9	6.1	6.3	2.2	3.1
AE425PJB561MSZ	0.56 ±20%	0.030	175	250	4.8	5.2	5.3	1.9	2.8
AE425PJB102NSZ	1.0 ±30%	0.040	126	180	2.8	3.0	3.1	1.8	2.7
AE425PJB222MSZ	2.2 ±20%	0.070	63	90	2.7	2.8	2.9	1.6	2.3
AE425PJB262MSZ	2.6 ±20%	0.080	59	85	2.6	2.7	2.8	1.5	2.0
AE425PJB332MSZ	3.3 ±20%	0.080	52	75	2.1	2.3	2.4	1.4	2.0
AE425PJB472MSZ	4.7 ±20%	0.125	45	65	1.8	1.9	1.9	1.3	1.8
AE425PJB682MSZ	6.8 ±20%	0.150	35	50	1.2	1.3	1.3	1.0	1.5
AE425PJB103MSZ	10 ±20%	0.200	28	40	1.1	1.2	1.3	0.90	1.25
AE425PJB153MSZ	15 ±20%	0.260	22	32	0.86	0.91	0.94	0.80	1.12
AE425PJB183MSZ	18 ±20%	0.270	18	27	0.78	0.83	0.85	0.70	1.00
AE425PJB223MSZ	22 ±20%	0.360	18	26	0.74	0.80	0.83	0.65	0.90
AE425PJB333MSZ	33 ±20%	0.420	14	20	0.58	0.64	0.68	0.55	0.80
AE425PJB473MSZ	47 ±20%	0.650	11	16	0.51	0.55	0.56	0.45	0.68
AE425PJB683MSZ	68 ±20%	0.950	9.0	13	0.41	0.45	0.46	0.40	0.56
AE425PJB104MSZ	100 ±20%	1.40	7.0	10	0.34	0.36	0.37	0.35	0.50
AE425PJB124MSZ	120 ±20%	1.60	6.0	9.0	0.31	0.33	0.34	0.30	0.45
AE425PJB154MSZ	150 ±20%	2.00	5.6	8.0	0.27	0.29	0.30	0.28	0.40
AE425PJB184MSZ	180 ±20%	2.50	5.2	7.5	0.24	0.26	0.27	0.26	0.36
AE425PJB224MSZ	220 ±20%	3.70	4.5	6.5	0.21	0.225	0.235	0.20	0.30
AE425PJB334MSZ	330 ±20%	5.90	3.8	5.5	0.18	0.19	0.20	0.17	0.23
AE425PJB474MSZ	470 ±20%	7.80	3.0	4.5	0.14	0.16	0.17	0.15	0.20
AE425PJB564MSZ	560 ±20%	10.0	2.8	4.0	0.13	0.14	0.15	0.14	0.18
AE425PJB684MSZ	680 ±20%	11.5	2.4	3.5	0.12	0.13	0.14	0.12	0.16
AE425PJB824MSZ	820 ±20%	14.0	2.0	2.9	0.11	0.12	0.13	0.10	0.14
AE425PJB105MSZ	1000 ±20%	18.0	1.9	2.8	0.10	0.11	0.11	0.098	0.125
AE425PJB155MSZ	1500 ±20%	25.0	1.6	2.4	0.095	0.10	0.105	0.080	0.110
AE425PJB185MSZ	1800 ±20%	31.5	1.6	2.3	0.090	0.095	0.100	0.070	0.095
AE425PJB225MSZ	2200 ±20%	32.5	1.4	2.1	0.088	0.099	0.100	0.070	0.090
AE425PJB335MSZ	3300 ±20%	48.0	1.1	1.6	0.082	0.092	0.094	0.055	0.075

1. When ordering, please specify **testing** code:

AE425PJB105MSZ

Testing: Z = COTS

**H = Screening per Coilcraft
CP-SA-10001**

**N = Screening per Coilcraft
CP-SA-10004**

- Inductance tested at 100 kHz, 0.1 Vrms using an Agilent/HP 4192A. Inductance at 1 MHz is the same for parts with SRF ≥10 MHz.
- DCR measured on a micro-ohmmeter.
- SRF measured using Agilent/HP 8753ES or equivalent.
- DC current that causes the specified inductance drop from its value without current.
- Current that causes the specified temperature rise from 25°C ambient.
- Electrical specifications at 25°C.
Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

Coilcraft CPS
CRITICAL PRODUCTS & SERVICES

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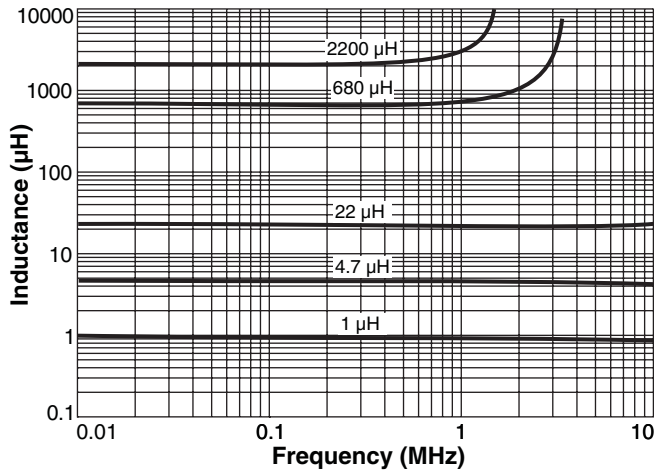
Fax 847-639-1508
Email cps@coilcraft.com
www.coilcraft-cps.com

Document AE435-1 Revised 06/07/11

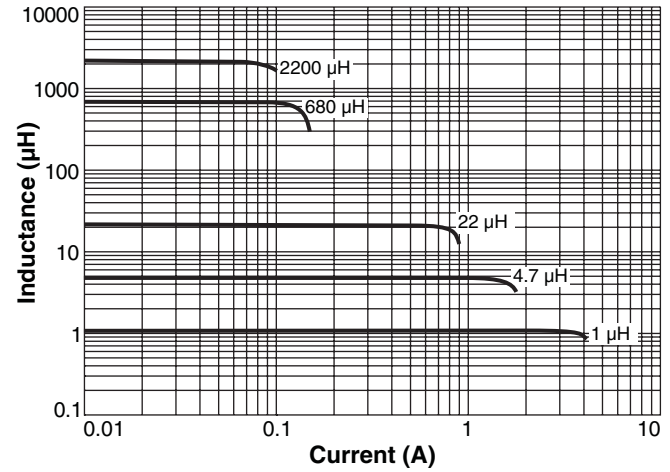
This product may not be used in medical or high risk applications without prior Coilcraft approval. Specifications subject to change without notice. Please check our web site for latest information.

AE425PJB Series (4018)

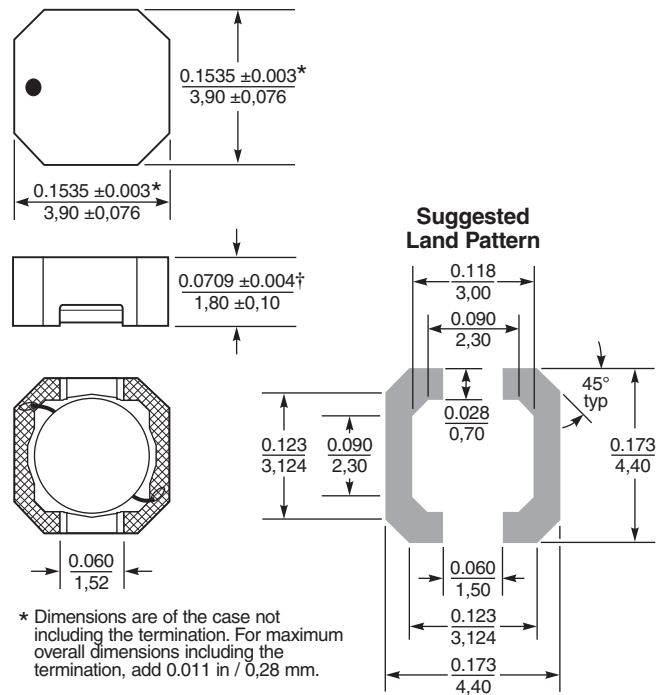
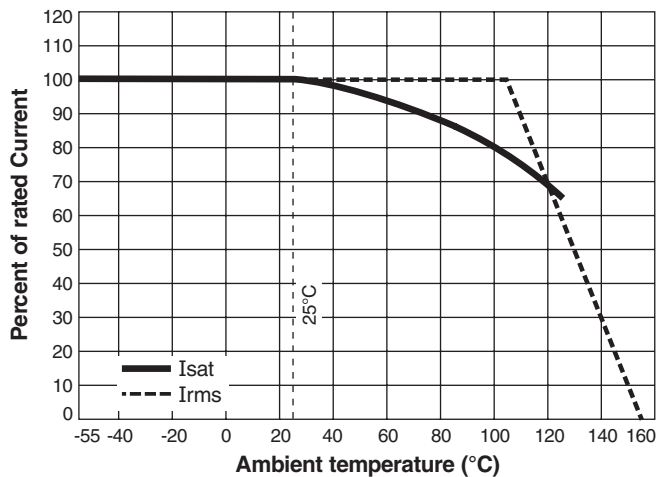
Typical L vs Frequency



Typical L vs Current



Current Derating



* Dimensions are of the case not including the termination. For maximum overall dimensions including the termination, add 0.011 in / 0,28 mm.

† Height dimension is after mounting. For maximum height dimension before mounting, add 0.006 in / 0,152 mm.

Dimensions are in $\frac{\text{inches}}{\text{mm}}$



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