

Features

- High resistance to heat and humidity
- Resistance to mechanical shock and pressure
- Accurate dimensions for automatic surface mounting
- Wide inductance range (1.0 nH to 1000 µH)
- RoHS compliant*

Additional Information

Click these links for more information:

PRODUCT SELECTOR | TECHNICAL LIBRARY | INVENTORY | SAMPLES | CONTACT

CM45 Series SMT Chip Inductors

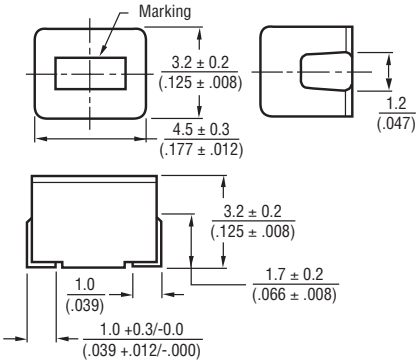
General Specifications

Temperature Rise ..... 20 ˚C max.
Ambient Temperature ..... 100 ˚C max.
Operating Temperature ..... -40 °C to +125 °C
Storage Temperature ..... -40 °C to +125 °C

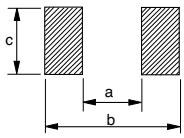
Materials

Core Material ..... Ferrite Core
Coil Type ..... Copper wire
Enclosure ..... Epoxy resin
Terminal Finish ..... Sn

Product Dimensions



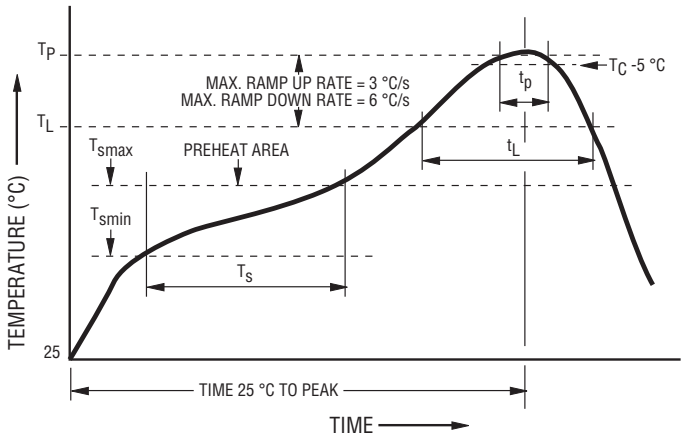
Recommended Land Pattern Dimensions



a	b	c
2.0 to 2.4 (.079 to .094)	5.0 to 5.3 (.197 to .209)	1.4 to 1.7 (.055 to .067)

DIMENSIONS: MM / (INCHES)

Soldering Profile



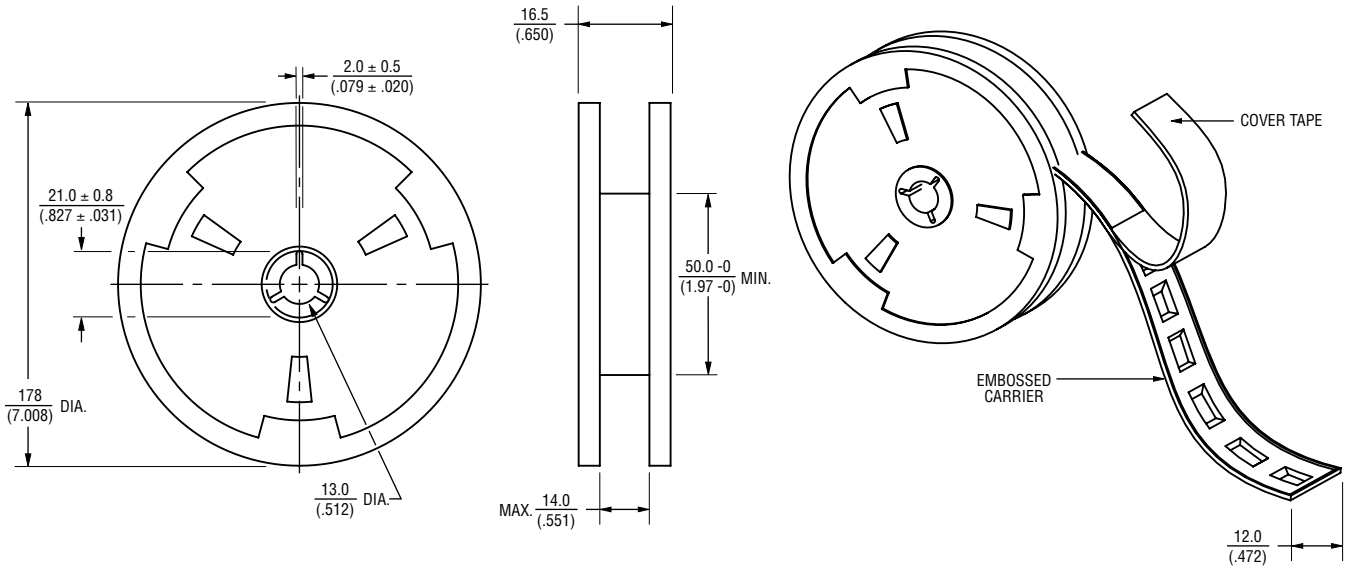
Profile Feature	Pb-Free Assembly
Preheat / Soak: Temperature Min. (T_{smin}) Temperature Max. (T_{smax}) Time (t_s) from (T_{smin} to T_{smax})	 150 °C 200 °C 60~120 seconds
Ramp Up Rate (T_L to T_p)	3 °C / second max.
Liquidous Temperature (T_L) Time (t_L) maintained above T_L	217 °C 60~150 seconds
Classification Temperature (T_c)	250 °C
Time (t_p) within 5 °C of the specified classification temperature (T_c)	< 30 seconds
Ramp Down Rate (T_p to T_L)	6 °C / second max.
Time 25 °C to Peak Temperature	8 minutes max.

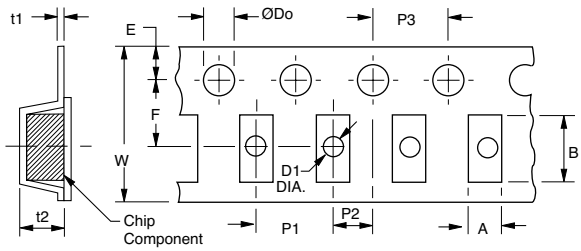
NOTE: The product has been tested under this reflow condition. Deviations from this, especially higher temperatures or longer durations, could impact performance.

CALIFORNIA WARNING: Can expose you to lead, a carcinogen and reproductive toxicant.
See www.P65Warnings.ca.gov

*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.
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Users should verify actual device performance in their specific applications.
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Packaging Specifications





DIMENSIONS: MM / (INCHES)

USER DIRECTION OF FEED

QTY: 500 PCS. PER REEL

A	B	W	F	E	P1	P2	P3	D0 Dia.	D1 Dia.	t1	t2
3.60 (.142)	4.90 (.193)	12.00 (.472)	5.50 (.217)	1.75 (.069)	8.00 (,315)	2.00 (.079)	4.00 (.157)	1.50 (.059)	1.00 (.039)	0.25 (.010)	3.50 (.138)

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CM45 Series SMT Chip Inductors

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RoHS Compliant 1812 Size Part Number	Inductance μH	Std. Tolerance	Std. Tol. Code	1/2 Tolerance	1/2 Tol. Code	Q min.	Test Freq. MHz	SRF typ. MHz	RDC ohm max	IDC mA max
CM453232-R10<1>L	0.10	±20 %	M	±10 %	K	35	25.2	780	0.18	800
CM453232-R12<1>L	0.12	±20 %	M	±10 %	K	35	25.2	735	0.20	770
CM453232-R15<1>L	0.15	±20 %	M	±10 %	K	35	25.2	615	0.22	730
CM453232-R18<1>L	0.18	±20 %	M	±10 %	K	35	25.2	570	0.24	700
CM453232-R22<1>L	0.22	±20 %	M	±10 %	K	40	25.2	505	0.25	665
CM453232-R27<1>L	0.27	±20 %	M	±10 %	K	40	25.2	450	0.26	635
CM453232-R33<1>L	0.33	±20 %	M	±10 %	K	40	25.2	425	0.28	605
CM453232-R39<1>L	0.39	±20 %	M	±10 %	K	40	25.2	390	0.30	575
CM453232-R47<1>L	0.47	±20 %	M	±10 %	K	40	25.2	350	0.32	545
CM453232-R56<1>L	0.56	±20 %	M	±10 %	K	40	25.2	325	0.36	520
CM453232-R68<1>L	0.68	±20 %	M	±10 %	K	40	25.2	300	0.40	500
CM453232-R82<1>L	0.82	±20 %	M	±10 %	K	40	25.2	275	0.45	475
CM453232-1R0<1>L	1.0	±10 %	K	±5 %	J	50	7.96	250	0.50	450
CM453232-1R2<1>L	1.2	±10 %	K	±5 %	J	50	7.96	240	0.55	430
CM453232-1R5<1>L	1.5	±10 %	K	±5 %	J	50	7.96	210	0.60	410
CM453232-1R8<1>L	1.8	±10 %	K	±5 %	J	50	7.96	190	0.65	390
CM453232-2R2<1>L	2.2	±10 %	K	±5 %	J	50	7.96	160	0.70	380
CM453232-2R7<1>L	2.7	±10 %	K	±5 %	J	50	7.96	150	0.75	370
CM453232-3R3<1>L	3.3	±10 %	K	±5 %	J	50	7.96	110	0.80	355
CM453232-3R9<1>L	3.9	±10 %	K	±5 %	J	50	7.96	100	0.90	330
CM453232-4R7<1>L	4.7	±10 %	K	±5 %	J	50	7.96	80	1.00	315
CM453232-5R6<1>L	5.6	±10 %	K	±5 %	J	50	7.96	50	1.10	300
CM453232-6R8<1>L	6.8	±10 %	K	±5 %	J	50	7.96	35	1.2	285
CM453232-8R2<1>L	8.2	±10 %	K	±5 %	J	50	7.96	28	1.4	270
CM453232-100<1>L	10	±10 %	K	±5 %	J	50	2.52	22	1.6	250
CM453232-120<1>L	12	±10 %	K	±5 %	J	50	2.52	20	2	225
CM453232-150<1>L	15	±10 %	K	±5 %	J	50	2.52	18	2.5	200
CM453232-180<1>L	18	±10 %	K	±5 %	J	50	2.52	16	2.8	190
CM453232-220<1>L	22	±10 %	K	±5 %	J	50	2.52	14	3.2	180
CM453232-270<1>L	27	±10 %	K	±5 %	J	50	2.52	13	3.6	170
CM453232-330<1>L	33	±10 %	K	±5 %	J	50	2.52	12	4	160
CM453232-390<1>L	39	±10 %	K	±5 %	J	50	2.52	11	4.5	150
CM453232-470<1>L	47	±10 %	K	±5 %	J	50	2.52	10.5	5	140
CM453232-560<1>L	56	±10 %	K	±5 %	J	50	2.52	10	5.5	135
CM453232-680<1>L	68	±10 %	K	±5 %	J	50	2.52	9.5	6	130
CM453232-820<1>L	82	±10 %	K	±5 %	J	50	2.52	8.5	7	120
CM453232-101<1>L	100	±10 %	K	±5 %	J	40	0.796	8	8	110
CM453232-121<1>L	120	±10 %	K	±5 %	J	40	0.796	7	8	110
CM453232-151<1>L	150	±10 %	K	±5 %	J	40	0.796	6	9	105
CM453232-181<1>L	180	±10 %	K	±5 %	J	40	0.796	5.5	9.5	102
CM453232-221<1>L	220	±10 %	K	±5 %	J	40	0.796	5	10	100
CM453232-271<1>L	270	±10 %	K	±5 %	J	40	0.796	4.5	12	92
CM453232-331<1>L	330	±10 %	K	±5 %	J	40	0.796	4	14	85
CM453232-391<1>L	390	±10 %	K	±5 %	J	40	0.796	3.5	18	80
CM453232-471<1>L	470	±10 %	K	±5 %	J	40	0.796	3.5	26	62
CM453232-561<1>L	560	±10 %	K	±5 %	J	30	0.796	3	30	50
CM453232-681<1>L	680	±10 %	K	±5 %	J	30	0.796	3	30	50
CM453232-821<1>L	820	±10 %	K	±5 %	J	30	0.796	2.5	35	30
CM453232-102<1>L	1000	±10 %	K	±5 %	J	20	0.252	2.5	40	30

<1> Enter tolerance code from standard or 1/2 tolerance column. Example: CM453232-1R2KL is standard tolerance; CM453232-1R2JL is 1/2 tolerance.

REV. 05/26

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