

I . SCOPE :

This specification applies to the Pb Free high current type SMD inductors for
MSCDRI-7045ALCH0-SERIES

Warn : This product series can't be used in synchronous rectification circuit that is over 24V.

PRODUCT IDENTIFICATION

MSCDRI - 7045ALC H0 - 1R0 N

① ② ③ ④ ⑤

① Product Code

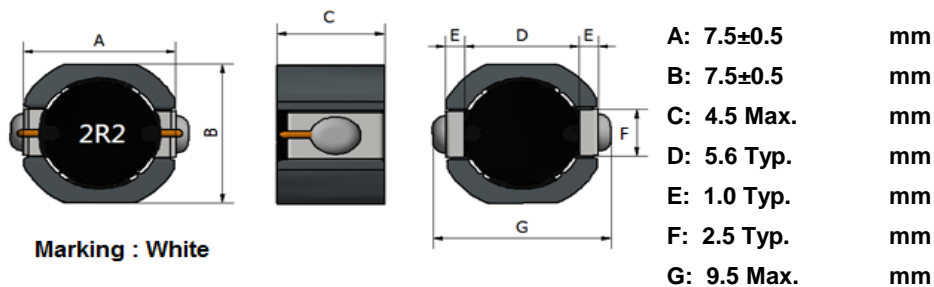
② Dimensions Code

③ AEC-Q200 Code

④ Inductance Code

⑤ Tolerance Code

(1) SHAPES AND DIMENSIONS



(2) ELECTRICAL SPECIFICATIONS

SEE TABLE 1

TEST INSTRUMENTS

L : HP 4284A PRECISION LCR METER (or equivalent)

RDC : CHROMA MODEL 16502 MILLIOHMMETER (or equivalent)

(3) CHARACTERISTICS

(3)-1 Operate temperature range $-50^{\circ}\text{C} \sim +150^{\circ}\text{C}$

(Including self temp. rise)

Note: On customer side this product series need to be fixed by the glue after IR reflow.

Please refer to below example photo:



TABLE 1

MAGLAYERS PT/NO.	Inductance L(μ H)	Percent Tolerance	Resistance RDC(Ω)	Rated DC Current		Marking
				Isat(A)	Irms(A)	
MSCDRI-7045ALCH0-1R0□	1.0	N	9m \pm 30%	8.50	11.0	1R0
MSCDRI-7045ALCH0-1R5□	1.5	N	10m \pm 30%	6.30	8.60	1R5
MSCDRI-7045ALCH0-2R2□	2.2	N	13m \pm 30%	6.20	6.30	2R2
MSCDRI-7045ALCH0-3R3□	3.3	N	16m \pm 30%	4.70	6.00	3R3
MSCDRI-7045ALCH0-4R7□	4.7	N	18m \pm 30%	4.10	4.80	4R7
MSCDRI-7045ALCH0-6R8□	6.8	N	22m \pm 30%	3.10	4.10	6R8
MSCDRI-7045ALCH0-100□	10	M,N	33m \pm 20%	3.00	3.40	100
MSCDRI-7045ALCH0-150□	15	M,N	55m \pm 20%	2.30	2.80	150
MSCDRI-7045ALCH0-220□	22	M,N	69m \pm 20%	1.70	2.40	220
MSCDRI-7045ALCH0-270□	27	M,N	83m \pm 20%	1.65	2.10	270
MSCDRI-7045ALCH0-330□	33	M,N	97m \pm 20%	1.60	1.90	330
MSCDRI-7045ALCH0-470□	47	M,N	0.13 \pm 20%	1.26	1.60	470
MSCDRI-7045ALCH0-680□	68	M,N	0.17 \pm 20%	1.08	1.30	680
MSCDRI-7045ALCH0-101□	100	M,N	0.26 \pm 20%	0.81	1.10	101

※ Test Frequency:100KHz/0.1V

※ □ specify the inductance tolerance , M(\pm 20%) , N(\pm 30%)

※ Isat : Based on inductance change (Δ L/Lo : drop 30% Max.) @ ambient temp. 25℃

Irms : Based on temperature rise (Δ T : 40℃ Typ.)

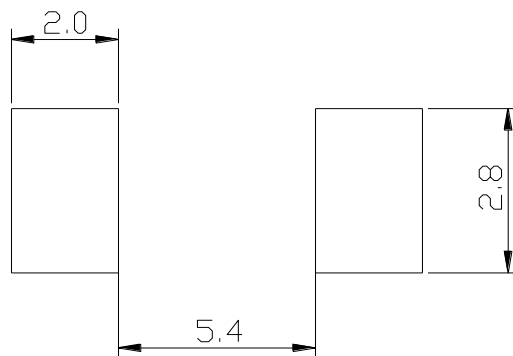
Rated DC Current : The less value which is Isat or Irms.

(4) LAND DIMENSION (Ref.)

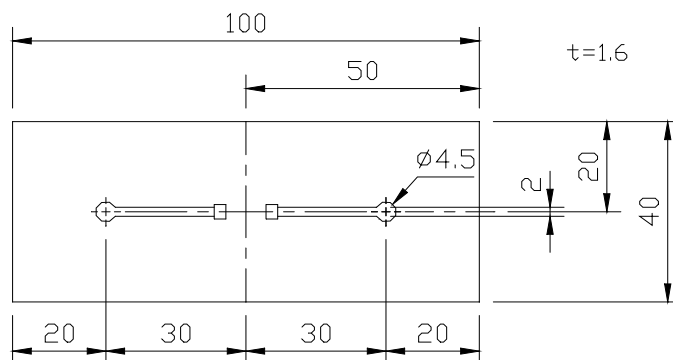
PCB: GLASS EPOXY $t=1.6\text{mm}$

(4)-1 LAND PATTERN DIMENSIONS

(STANDARD PATTERN) Unit : mm



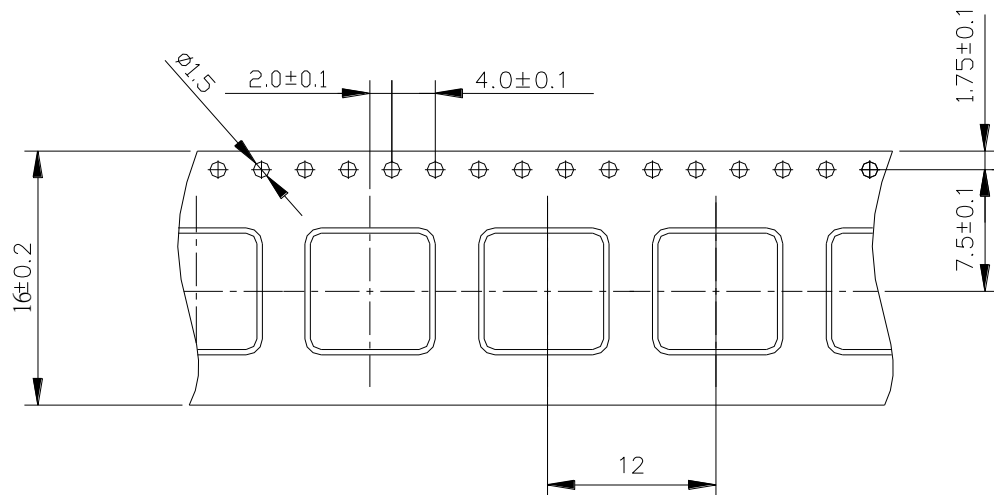
(4)-2 SUBSTRATE BENDING TEST BENDING TEST BOARD



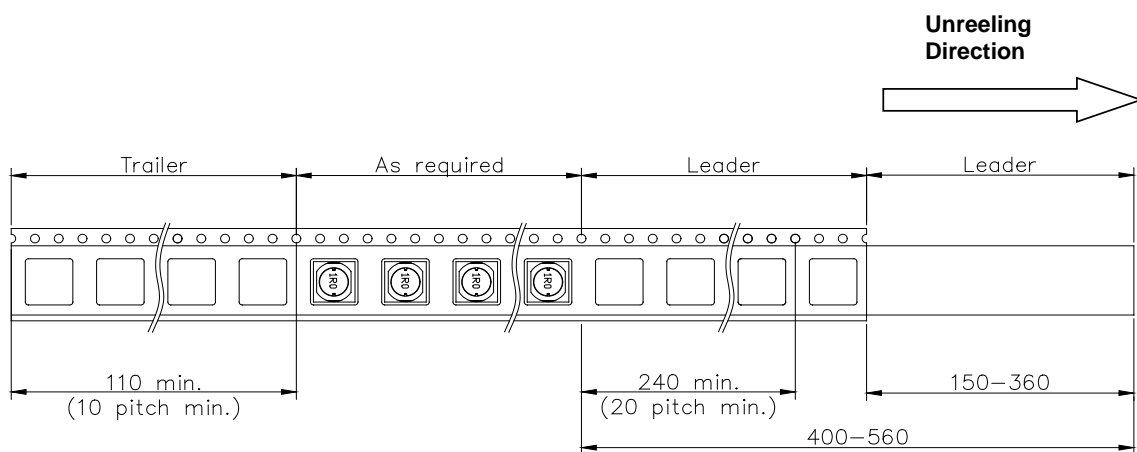
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(5) PACKAGING

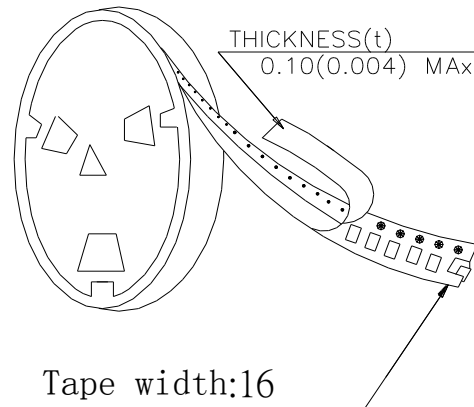
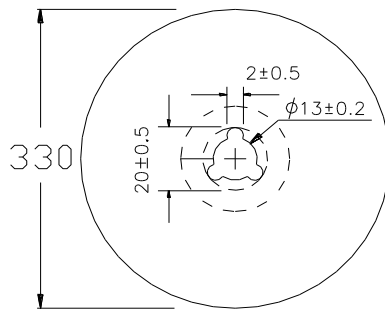
(5)-1 CARRIER TAPE DIMENSIONS (mm)



(5)-2 TAPING DIMENSIONS (mm)



(5)-3 REEL DIMENSIONS (mm)



(5)-4 QUANTITY

1000 pcs/Reel

The products are packaged so that no damage will be sustained.

Please note that the contents may change without any prior notice due to reasons such as upgrading.



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