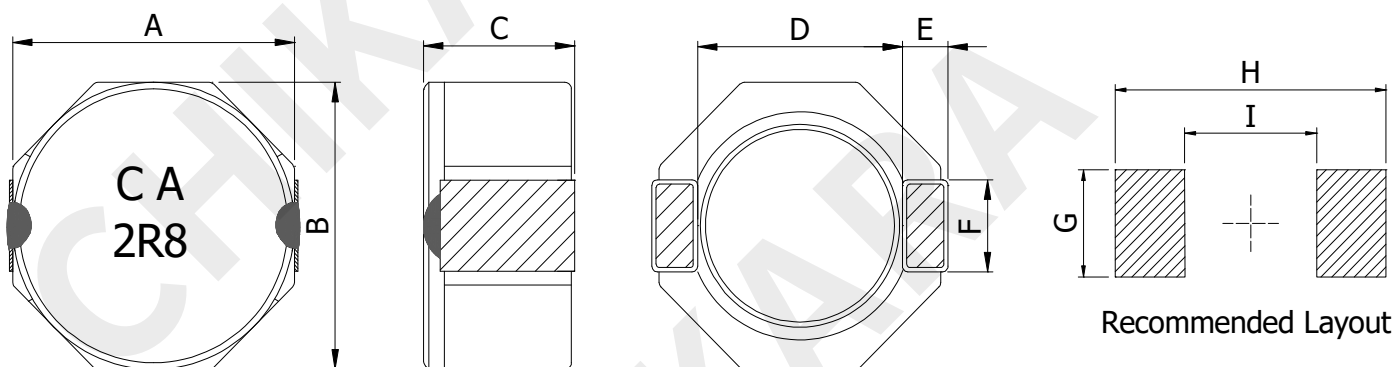


Features

- Magnetically shielded construction
- Storage temperature range:-55°C to +150°C
- Operating temperature range:-55°C to +150°C (including coil's self-temperature rise)
- Moisture sensitivity level:1
- AEC-Q200 qualified
- Packaging:800pcs. Per 13-inch reel
- RoHs&Halogen-free compliant



Mechanical Dimension(Unit:mm)



A	B	C	D	E	F	G	H	I
8.0±0.3	8.0±0.3	6.0Max.	6.3	1.2	2.5	2.8	10.1	6.1

Part Number Description

SPA02 - 8058 2R8 N
① ② ③ ④

①	Type
②	Dimensions
③	Inductance value
④	Tolerance code

Electrical Schematic

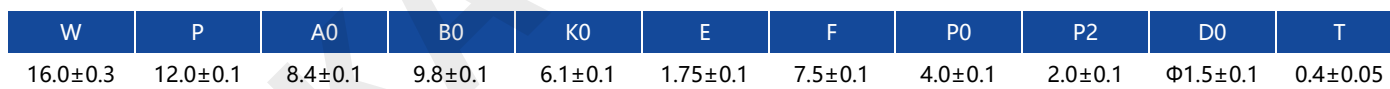


Electrical Characteristic

Part Number	Inductance L0(uH)	DCR (mΩ)Typ.	DCR (mΩ)Max.	Isat (A)Max.	Irms (A)Max.
SPA02-80582R8N	2.8±30%	12.0	15.0	4.7	6.9
SPA02-80583R9N	3.9±30%	13.0	16.3	4.1	6.3
SPA02-80585R0N	5.0±30%	14.0	17.5	3.8	6.0
SPA02-80586R2N	6.2±30%	16.0	20.0	3.3	5.5
SPA02-8058100M	10±20%	22.0	25.6	2.6	4.5
SPA02-8058150M	15±20%	27.0	36.3	2.3	3.6
SPA02-8058220M	22±20%	39.0	45.3	1.7	3.3
SPA02-8058330M	33±20%	52.0	65.3	1.5	2.7
SPA02-8058470M	47±20%	75.0	90.5	1.2	2.2
SPA02-8058680M	68±20%	104	130	1.0	1.7
SPA02-8058101M	100±20%	140	175	0.8	1.4

- Test frequency and voltage:100KHz,0.1Vrms.
- All test data referenced to 25°C ambient.
- Saturation current(Isat) will cause L0 to drop approximately 35%.
- Heat rated current(Irms) will cause the coil temperature rise approximately Δt of 40°C.

- Carrier Tape (Unit:mm)

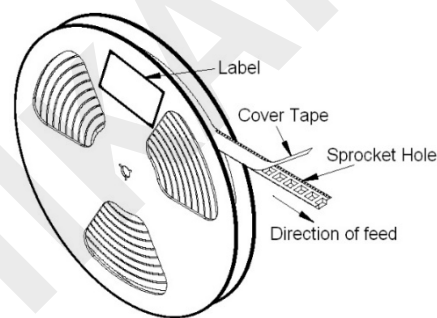


- Reel (Unit:mm)

The technical drawing consists of two views of a mechanical part. The front view on the left shows a circular cross-section with a central hole and three curved, wedge-shaped features arranged symmetrically around the center. The side view on the right shows the profile of the part, which is a rectangle with a central cutout. The dimensions are labeled as follows: A is the total height of the part, B is the total width, C is the height of the central cutout, and D is the width of the central cutout.

- Taping Method

Diagram illustrating the peeling process. A carrier tape is being pulled by a force F in the pull direction. The carrier tape is shown with components. The peeling angle is indicated as $165^\circ \sim 180^\circ$. The direction of feed is also shown.



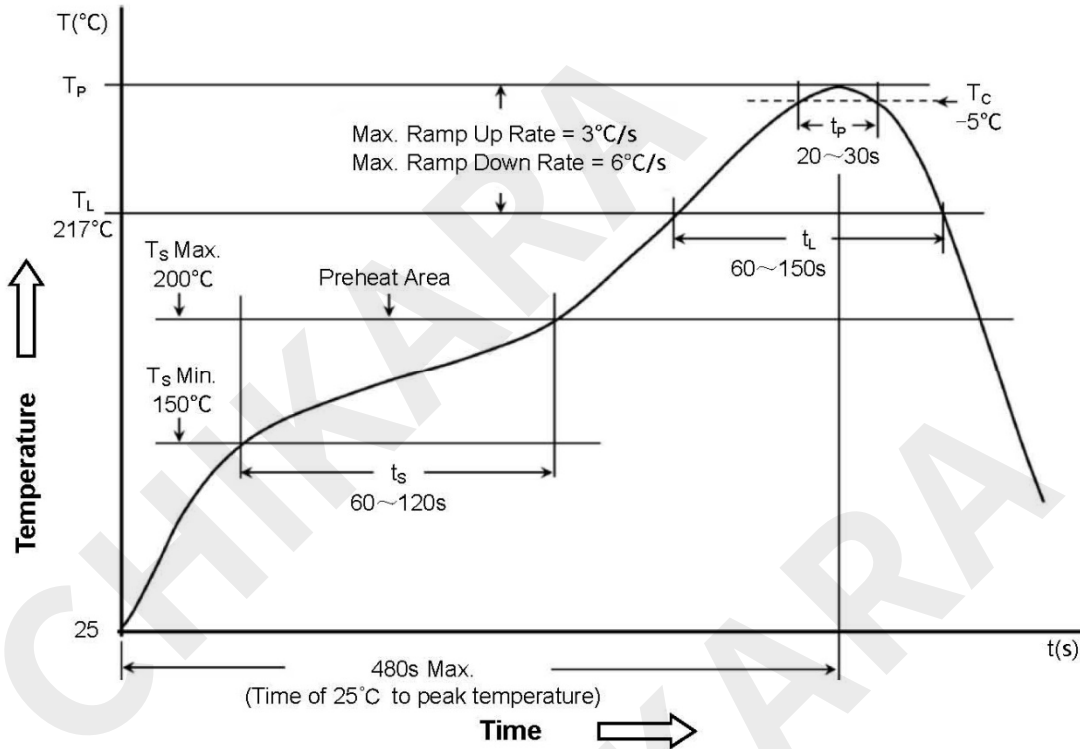
✖ Packing is referred to the international standard IEC 60286-3.

- Package Quantity

Page:3 of 4

Soldering Specification

- Reflow profile for SMT components



- Classification of peak package body temperature (Tp)

	Package Thickness	Package Volume		
		<350mm ³	350~2000mm ³	>2000mm ³
PB-Free Assembly	<1.6mm	260°C	260°C	260°C
	1.6~2.5mm	260°C	250°C	245°C
	≥2.5mm	250°C	245°C	245°C

※ Reflow is referred to standard IPC/JEDEC J-STD-020D.