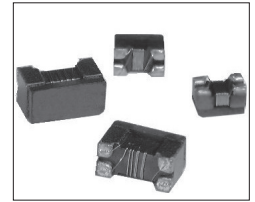


FEATURES

- HIGH RELIABILITY AEC-Q200 COMPLIANT
- HIGH COMMON MODE IMPEDANCE AT HIGH FREQUENCY
- SUITABLE FOR HIGH SPEED DIGITAL EQUIPMENT (USB/IEEE)
- LOW PROFILE SURFACE MOUNT PACKAGE (0805 ~ 4844)
- SHIELDED PROVIDING EXCELLENT NOISE SUPPRESSION
- BOTH FLOW AND REFLOW SOLDERING APPLICABLE



CHARACTERISTICS

Case Size	0805	1206	2824	3628	4844
Impedance Range	67 ~ 360 Ohms	90 ~ 2,200 Ohms	70 ~ 1300 Ohms	700 Ohms	700 ~ 1000 Ohms
Available Tolerance	±25%				
Temperature Range	-40°C ~ +125°C				
Withstanding voltage	125VDC 30 seconds				
Insulation Resistance	10MΩ after application 50V for 30 seconds				
Resistance to Solder Heat	260°C ±5°C for 10 seconds				
Temperature Cycling	±25% of initial value after 10 cycles (-40°C ± 2°C / +125°C ± 2°C)				

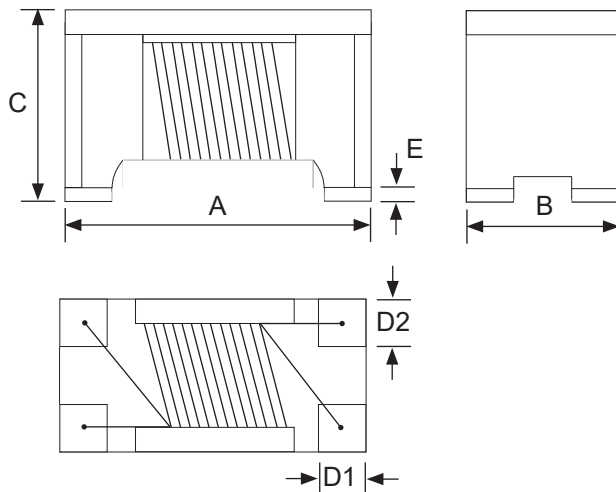
**RoHS
Compliant**
includes all homogeneous materials

*See Part Number System for Details

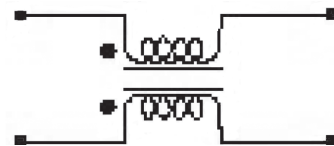
CASE DIMENSIONS (mm)

Type	A ±0.2	B ±0.2	C ±0.2	D1 ±0.1	D2 ±0.1	E ±0.1
NCCA0805	2.0	1.2	1.2	0.55	0.46	0.15
NCCA1206	3.2	1.6	2.0	0.50	0.50	0.15

See page 5 for 2824, 3628 & 4844 case dimensions



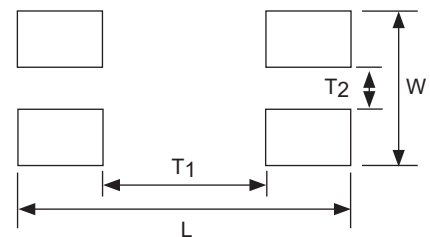
CIRCUIT SCHEMATIC



LAND PATTERN DIMENSIONS (mm)

Case Size	L	W	T1	T2
0805	2.60	1.25	1.10	0.45
1206	3.70	1.60	1.90	0.40

See page 5 for 2824, 3628 & 4844 land pattern dim.



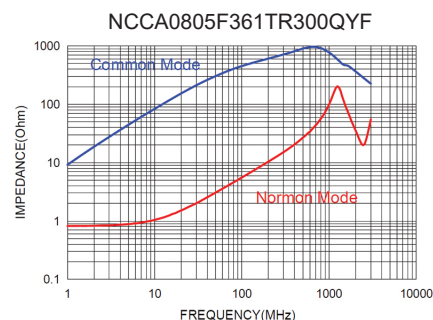
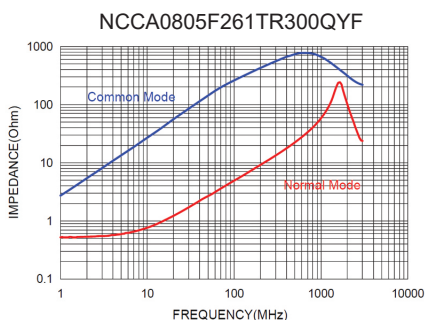
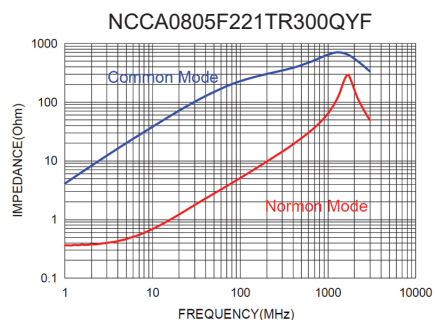
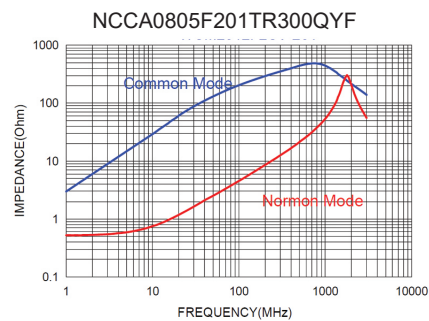
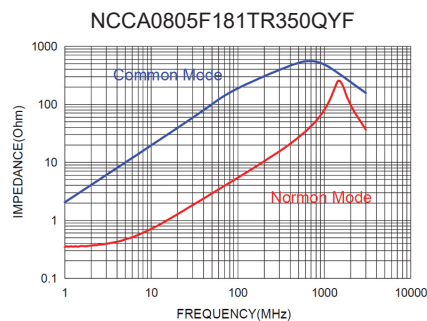
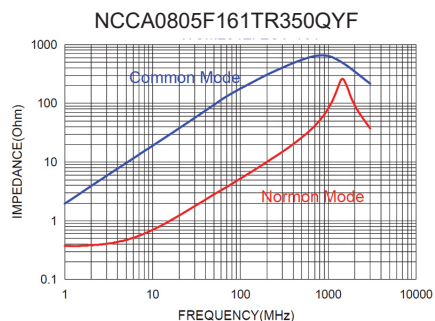
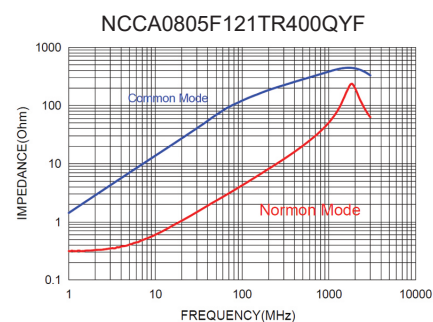
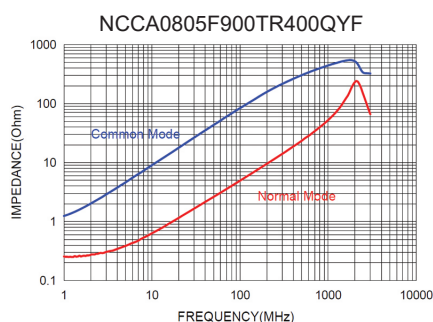
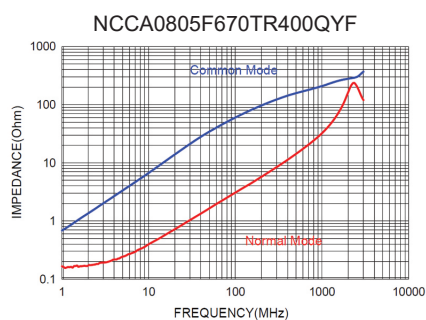
PART NUMBER SYSTEM

NCCA 0805 E 670 TR 400 QY E

- NCCA: Series
- 0805: Case Size
- E: Material (Ferrite)
- 670: Impedance at 100Mhz
3 digit code; first two digits are significant third digit is no. of zeros
- TR: Packaging: TR = Tape and Reel
- 400: DC Current Rating (Represented in mA)
- QY: "QY" denotes AEC Q-200 Qualified suitable for Automotive Equipment*
- E: RoHS Compliant

NCCA0805 SPECIFICATIONS

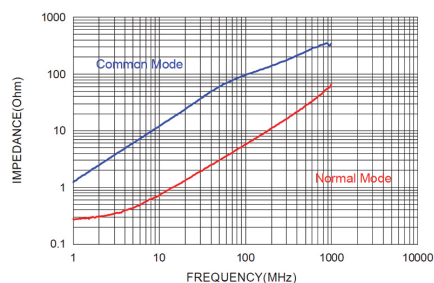
NIC Part Number	Impedance (Ω)	Test Frequency (MHz)	DC Resistance (Ω max.)	DC Current (mA max.)	Voltage Rating (Vdc)	Withstanding Voltage (Vdc)	Insulation Resistance (Ω)
NCCA0805F670TR400QYF	67 $\pm$ 25%	100	0.25	400	50	125	10Meg
NCCA0805F900TR400QYF	90 $\pm$ 25%		0.3	400			
NCCA0805F121TR400QYF	120 $\pm$ 25%		0.3	400			
NCCA0805F161TR350QYF	160 $\pm$ 25%		0.35	350			
NCCA0805F181TR350QYF	180 $\pm$ 25%		0.35	350			
NCCA0805F201TR300QYF	200 $\pm$ 25%		0.4	300			
NCCA0805F221TR300QYF	220 $\pm$ 25%		0.4	300			
NCCA0805F261TR300QYF	260 $\pm$ 25%		0.4	300			
NCCA0805F361TR300QYF	360 $\pm$ 25%		0.5	300			



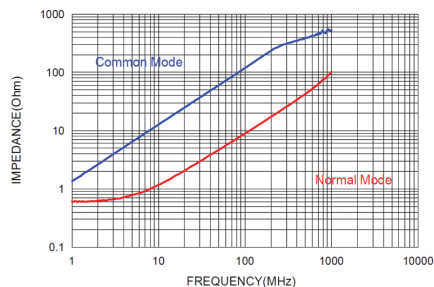
NCCA1206 SPECIFICATIONS

NIC Part Number	Impedance (Ω)	Test Frequency (MHz)	DC Resistance (Ω max.)	DC Current (mA max.)	Voltage Rating (Vdc)	Withstanding Voltage (Vdc)	Insulation Resistance (Ω)
NCCA1206F900TR400QYF	90 $\pm$ 25%	100	0.3	400	50	125	10Meg
NCCA1206F121TR350QYF	120 $\pm$ 25%		0.3	350			
NCCA1206F161TR350QYF	160 $\pm$ 25%		0.4	350			
NCCA1206F221TR300QYF	220 $\pm$ 25%		0.45	300			
NCCA1206F261TR300QYF	260 $\pm$ 25%		0.5	300			
NCCA1206F361TR300QYF	360 $\pm$ 25%		0.6	300			
NCCA1206F601TR300QYF	600 $\pm$ 25%		0.8	300			
NCCA1206F102TR230QYF	1000 $\pm$ 25%		1.0	230			
NCCA1206F222TR200QYF	2200 $\pm$ 25%		1.2	200			

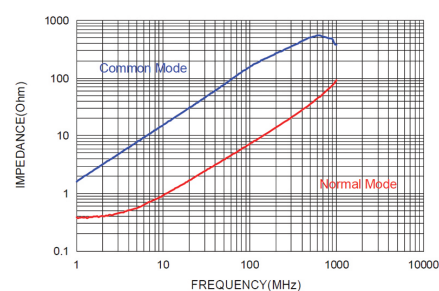
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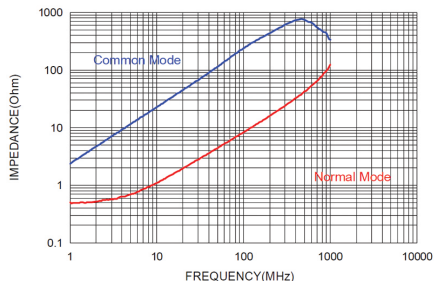
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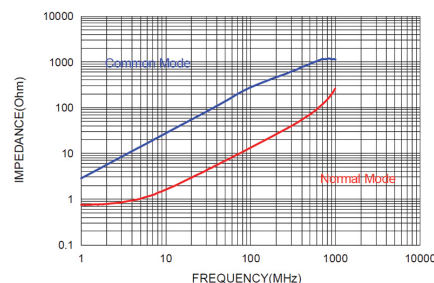
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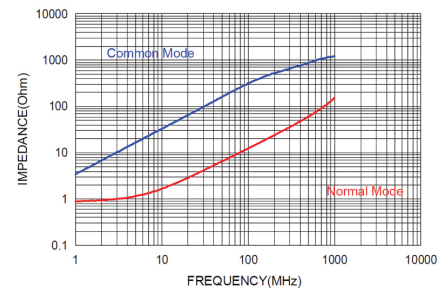
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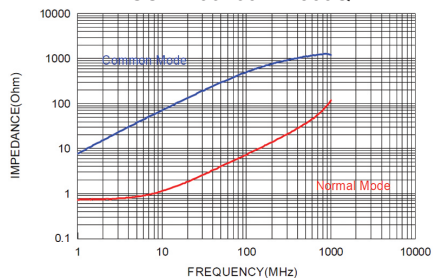
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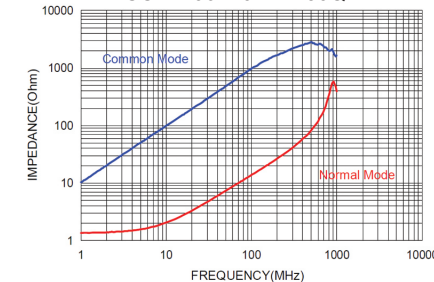
NCCA1206F361TR300QYF



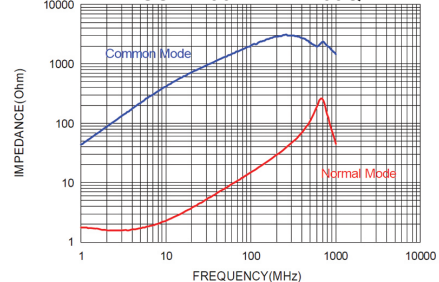
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NCCA1206F102TR230QYF

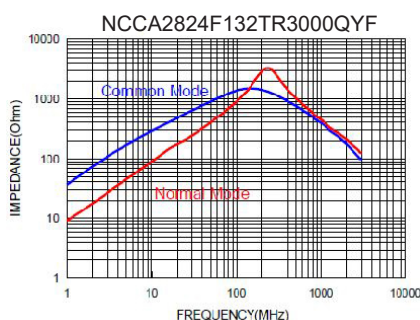
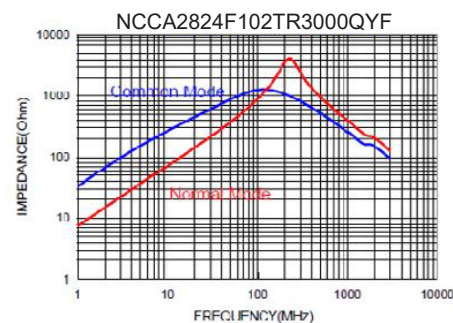
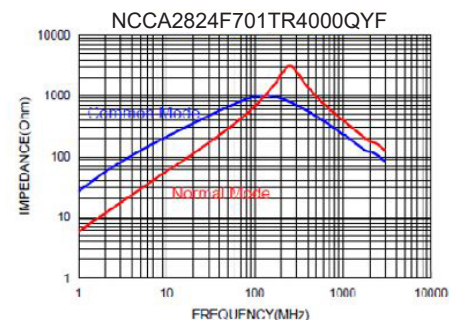
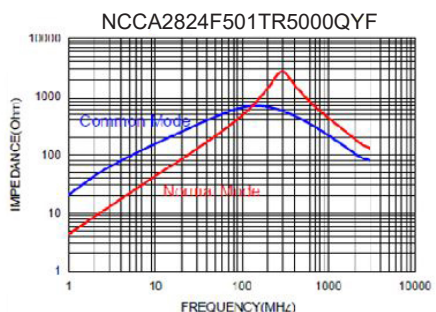
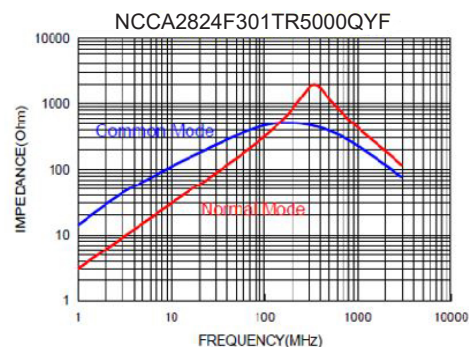
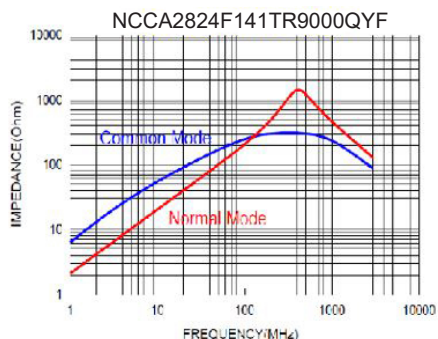
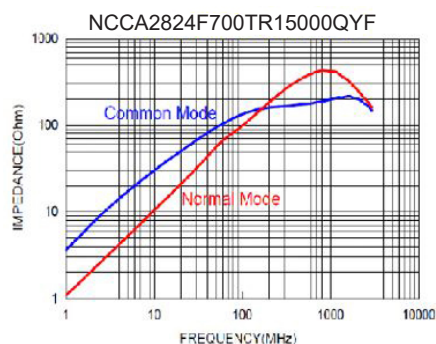


NCCA1206F222TR200QYF



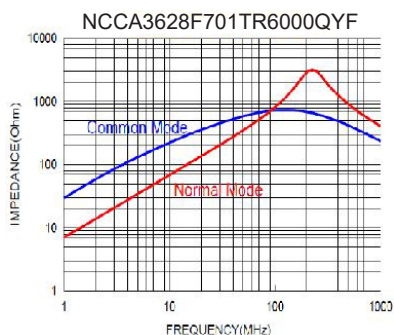
NCCA2824 SPECIFICATIONS

NIC Part Number	Impedance (Ω)		Test Frequency (MHz)	DC Resistance (Ω max.) per line	DC Current (mA max.)	Voltage Rating (Vdc)	Withstanding Voltage (Vdc)	Insulation Resistance (Ω)
	min.	typ.						
NCCA2824F700TR15000QYF	40	70	100	0.005	15,000	80	125	10Meg
NCCA2824F141TR9000QYF	100	140		0.010	9,000			
NCCA2824F301TR5000QYF	225	300		0.010	5,000			
NCCA2824F501TR5000QYF	400	500		0.010	5,000			
NCCA2824F701TR4000QYF	500	700		0.015	4,000			
NCCA2824F102TR3000QYF	800	1020		0.017	3,000			
NCCA2824F132TR3000QYF	910	1300		0.020	3,000			



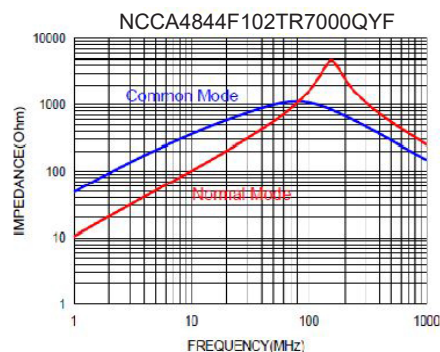
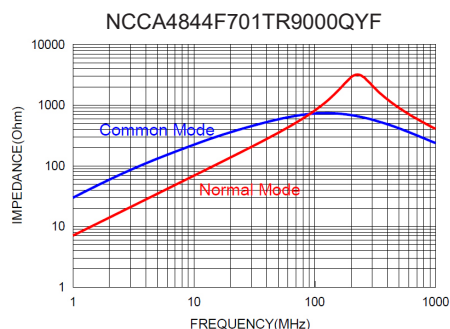
NCCA3628 SPECIFICATIONS

NIC Part Number	Impedance(Ω)		Test Frequency (MHz)	DC Resistance (Ω max.) per line	DC Current (mA max.)	Voltage Rating (Vdc)	Withstanding Voltage (Vdc)	Insulation Resistance (Ω)
	min.	typ.						
NCCA3628F701TR6000QYF	500	700	100	0.009	6,000	80	125	10Meg



NCCA4844 SPECIFICATIONS

NIC Part Number	Impedance (Ω)		Test Frequency (MHz)	DC Resistance (Ω max.) per line	DC Current (mA max.)	Voltage Rating (Vdc)	Withstanding Voltage (Vdc)	Insulation Resistance (Ω)
	min.	typ.						
NCCA4844F701TR9000QYF	500	700	100	0.005	9,000	80	125	10Meg
NCCA4844F102TR7000QYF	750	1000		0.008	7,000			

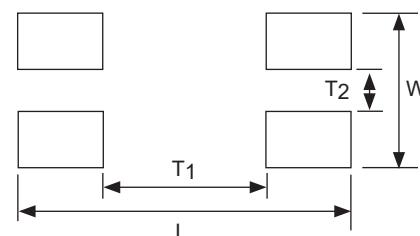
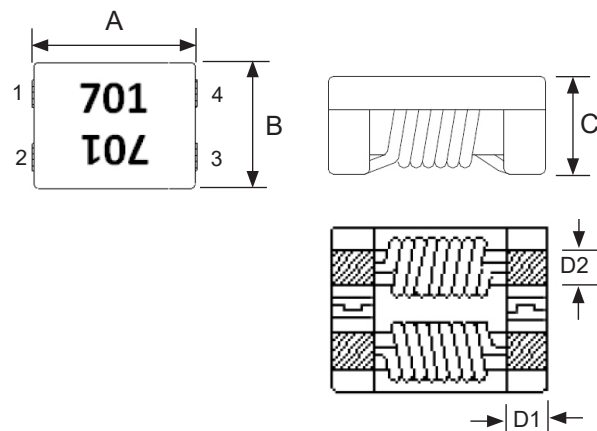


CASE DIMENSIONS (mm)

Type	A	B	C max.	D1 $\pm$ 0.5	D2 $\pm$ 0.5
NCCA2824	7.0 $\pm$ 0.5	6.0 $\pm$ 0.5	3.8	1.7	1.5
NCCA3628	9.0 $\pm$ 0.2	7.0 $\pm$ 0.2	4.5	1.8	1.5
NCCA4844	12.0 $\pm$ 0.3	11.0 $\pm$ 0.3	6.0	2.6	2.7

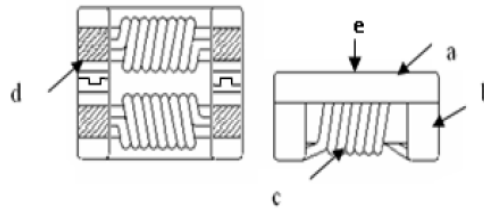
LAND PATTERN DIMENSIONS (mm)

Case Size	L	W	T1	T2
2824	8.0	4.5	3.5	1.5
3628	11.0	3.5	6.0	1.5
4844	14.0	5.2	7.4	2.7

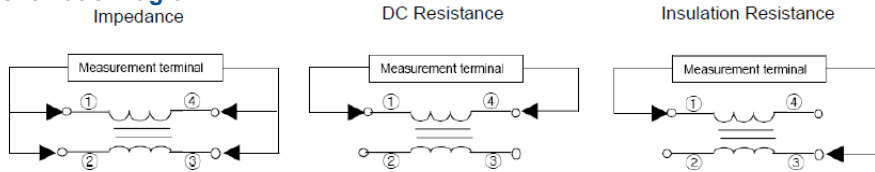


Construction

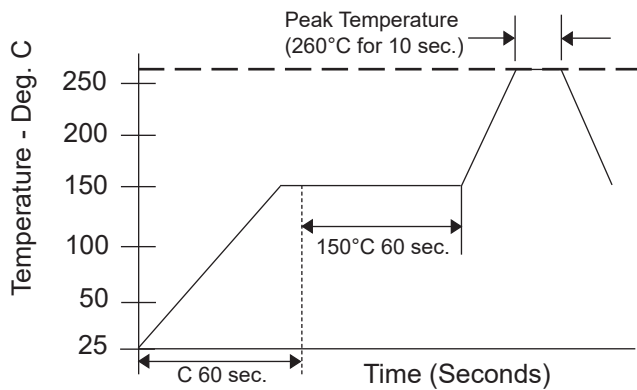
No.	Description	Specification
a.	Upper Plate	Plastic
b.	Core	Ferrite Core
c.	Wire	Enameled Copper
d.	Termination	Ag/Ni/Sn + Sn Solder
e.	Mark	Laser Marking



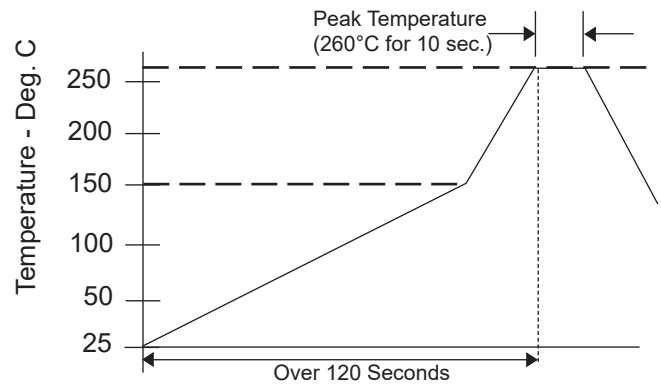
Schematic Diagram



RECOMMENDED REFLOW SOLDERING PROFILE



RECOMMENDED FLOW SOLDERING PROFILE



Tape Dimensions

Series	A ± 0.1	B ± 0.1	E ± 0.1	F ± 0.05	P ₀ ± 0.1	P ₁ ± 0.1	Dφ ± 0.1	W ± 0.1	t ₁ ± 0.05	t ₂ ± 0.1	Reel Quantity
NCCA0805	1.50	2.35	1.75	3.50	4.00	4.00	1.50	8.00	0.22	1.45	2,000
NCCA1206	1.88	3.50		7.50				16.00+0.3/-0.1	0.35	3.80	
NCCA2824	6.30	7.50		11.50				16.00+0.3	0.40	4.60	800
NCCA3628	8.60	9.60						24.00	0.50	6.40	500

