

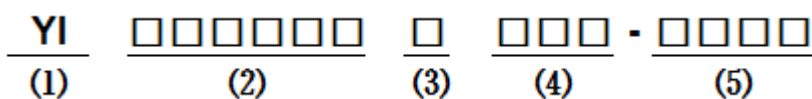
■ Features

- High density packaging with a pitch of 2.54mm(0.1 inch) max. is possible.
This series requires less space and has greater EMI suppression effects.
- Different types with the same shape are available.
- Excellent in physical properties, such as terminal strength, flexure strength, soldering resistance and solderability.
- Applicable to both flow and reflow soldering.
- High impedance cover wide frequency ranges.
- YI series can be used in high current circuits due to its low DC resistance.
- Operating temperature: -55°C ~ +125°C.

■ Applications

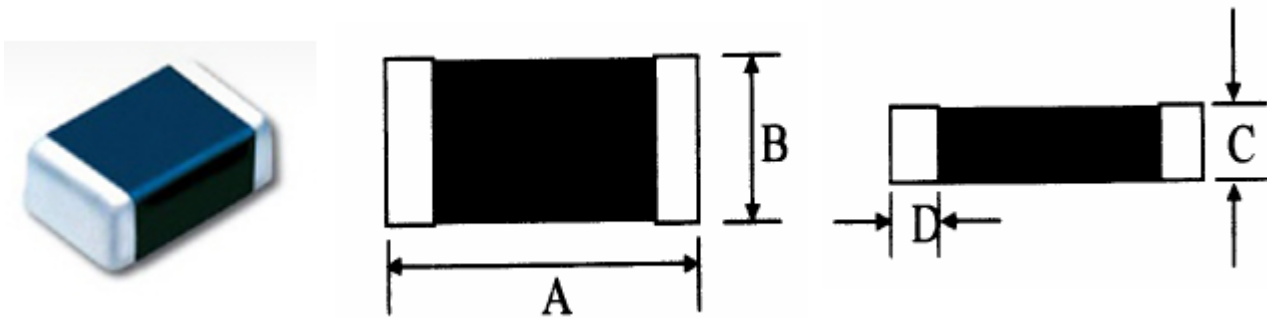
- Computers and peripheral devices, personal computers, VCR and cameras.
- Noise suppression in digital equipments, car stereo, car engines controllers and OA electronic instruments.
- Communication equipment.

■ Product Identification



- (1) : Type
- (2) : Dimensions
- (3) : Material Code
- (4) : Impedance
- (5) : Rated Current

Shapes and Dimensions (Unit: mm)



TYPE	A	B	C	D
YI853023	8.50±0.20	3.05±0.20	2.28±0.20	0.89±0.20

Electrical Requirements

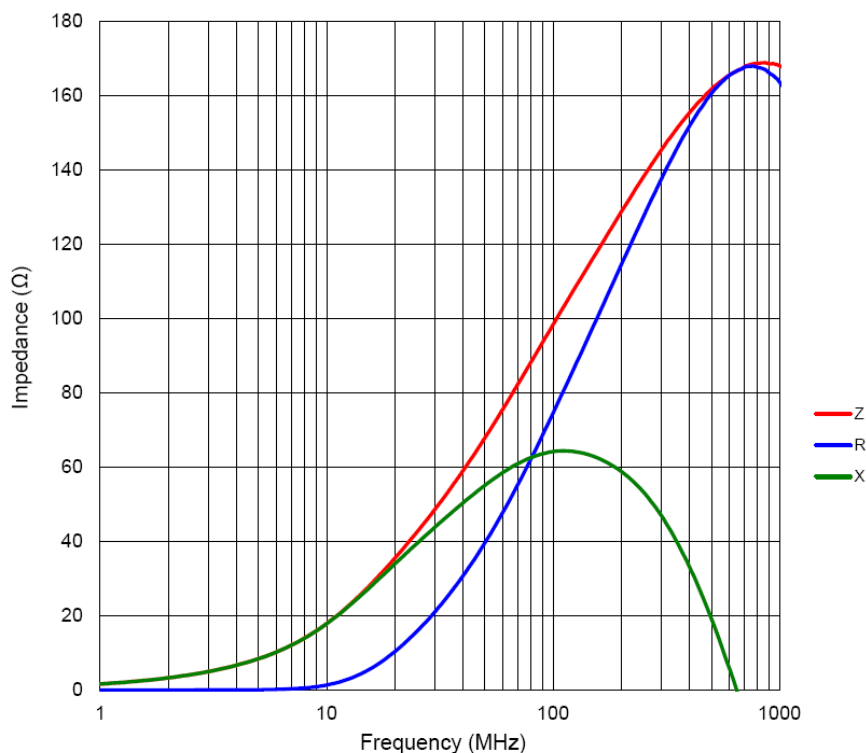
Part Number	Impedance(Ω) ±25%	Test Freq. (MHz)	DCR MAX. (mΩ)	Rating Current MAX (A)
YI853023U101-10R0T	100	100	4	10.0

TEST INSTRUMENTS:

HP 4338A MILLIOHM METER

HP 4291B RF IMPEDANCE/MATERIAL ANALYZER

Impedance VS. Frequency characteristic



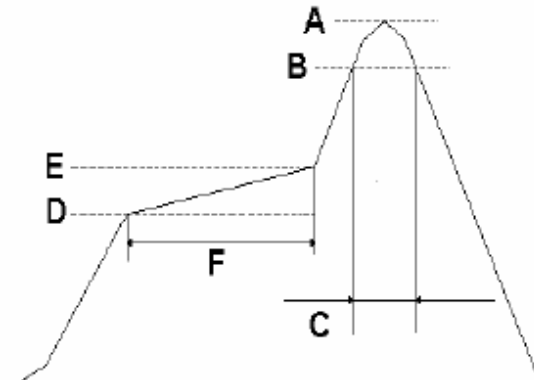
Reliability test

Item	Performance	Test condition
Operating temperature range	-55 °C to + 125 °C	
Storage temperature and umidity ranges	40 °C MAX., 70% RH MAX.	
Soldering heat resistance	The chip shall not be cracks. More than 75% of terminal electrode shall be covered with solder.	Preheat: 150 °C, 60 seconds Solder temperature : 270 ± 5 °C Flux: Rosin Dip time: 10 ± 1 seconds
Solderability	More than 90% of the terminal electrode shall be covered with new solder.	Preheat: 150 °C, 60 seconds Solder temperature: 245 ± 5 °C Flux: Rosin Dip time: 4 ± 1 seconds

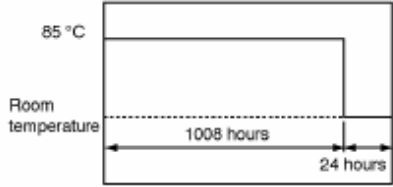
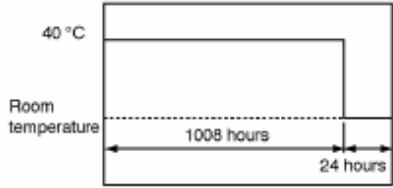
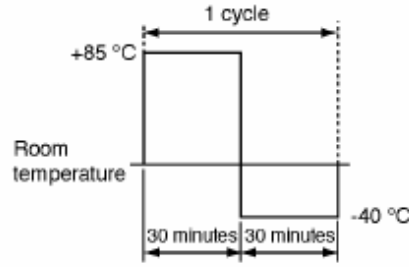
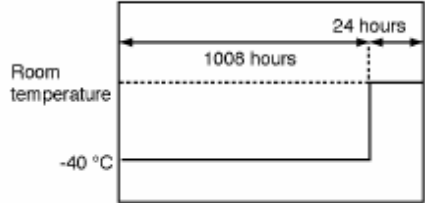
Recommended Soldering Conditions

(REFLOW TEMPERATURE PROFILE) **Lead-Free**

A	$260 \pm 5^{\circ}\text{C}$
B	$230 \pm 5^{\circ}\text{C}$
C	$30 \pm 10 \text{ sec}$
D	150°C
E	180°C
F	$90 \pm 30 \text{ sec}$

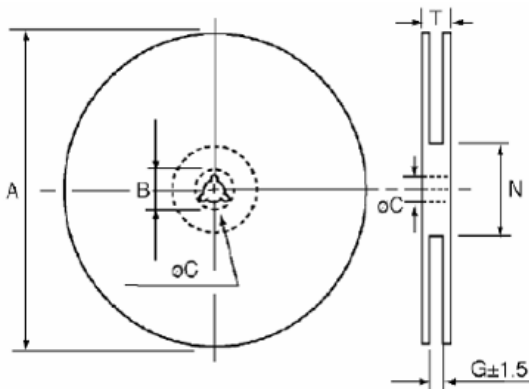


Reliability test

Item	Performance	Test condition
High temperature resistance	Appearance: Ferrite shall not be damaged. Impedance: Within±20% of the initial value.	Temperature: 85±2°C Testing time: 1008±12 hours Measurement: After placing for 24 hours min. 
Humidity resistance	Appearance: Ferrite shall not be damaged. Impedance: Within±20% of the initial value	Humidity: 90 to 95% RH Temperature: 40±2°C Testing time: 1008±12 hours Measurement: After placing for 24 hours min. 
Thermal Shock	Appearance: Cracking, chipping or any other defects harmful to the characteristics shall not be allowed. Impedance: Within±20% of the initial value	Temperature: -40°C, +85°C, kept stabilized for 30 minutes each Cycle: 100 cycles Measurement: After placing for 24 hours min. 
Low temperature storage life test	Appearance: Cracking, chipping or any other defects harmful to the characteristics shall not be allowed. Impedance: Within±20% of the initial value.	Temperature: -40±2°C Testing time: 1008±12 hours Measurement: After placing for 24 hours min. 

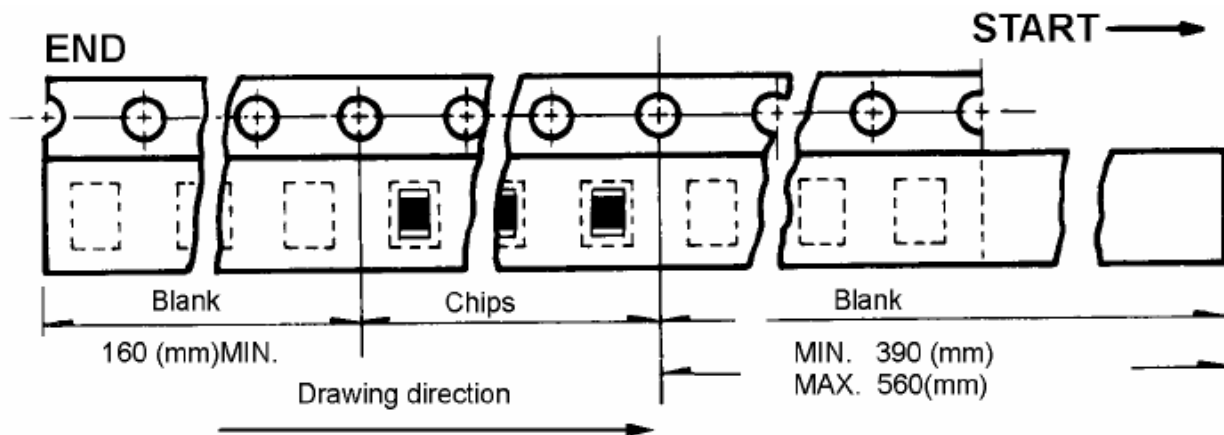
Reel Dimensions(Unit:mm)

Material of Reel is Polystyrene



TYPE	Dimensions in m/m					
	A	B	C	G	N	T
13"×8m/m	330	24.4	13.5	8.8	99	12.8
13"×12m/m	330	24.4	13.5	12.7	99	16.7
13"×16m/m	330	24.4	13.5	16.7	99	20.7

Direction of rolling



Packing Quantity

SIZE (m/m)	403023	453223	565015	565018	565020	565030	565032	565036	853023
Quantity PCS/Reel	2,500	2,500	2,000	2,000	2,000	2,000	2,000	2,000	2,500