■ 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 soderability.
- 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:-40℃ ~ +125℃.

■ 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

YI □□□□□□ □ □□□ - □□□□
(1) (2) (3) (4) (5)

(1)： Type

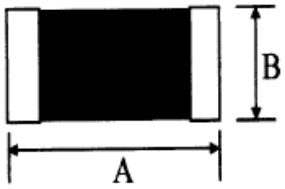
(2)： Dimensions

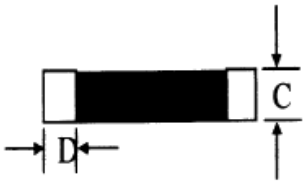
(3)： Material Code

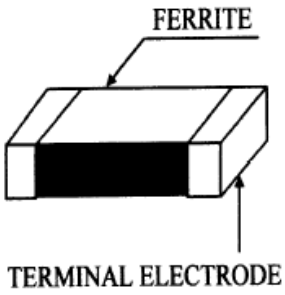
(4)： Impedance

(5)： Rated Current

■ Shapes and Dimensions (Unit：mm)







TYPE	A	B	C	D
YI403023	4.06±0.20	3.05±0.20	2.28±0.2	0.70±0.25

■ Electrical Requirements

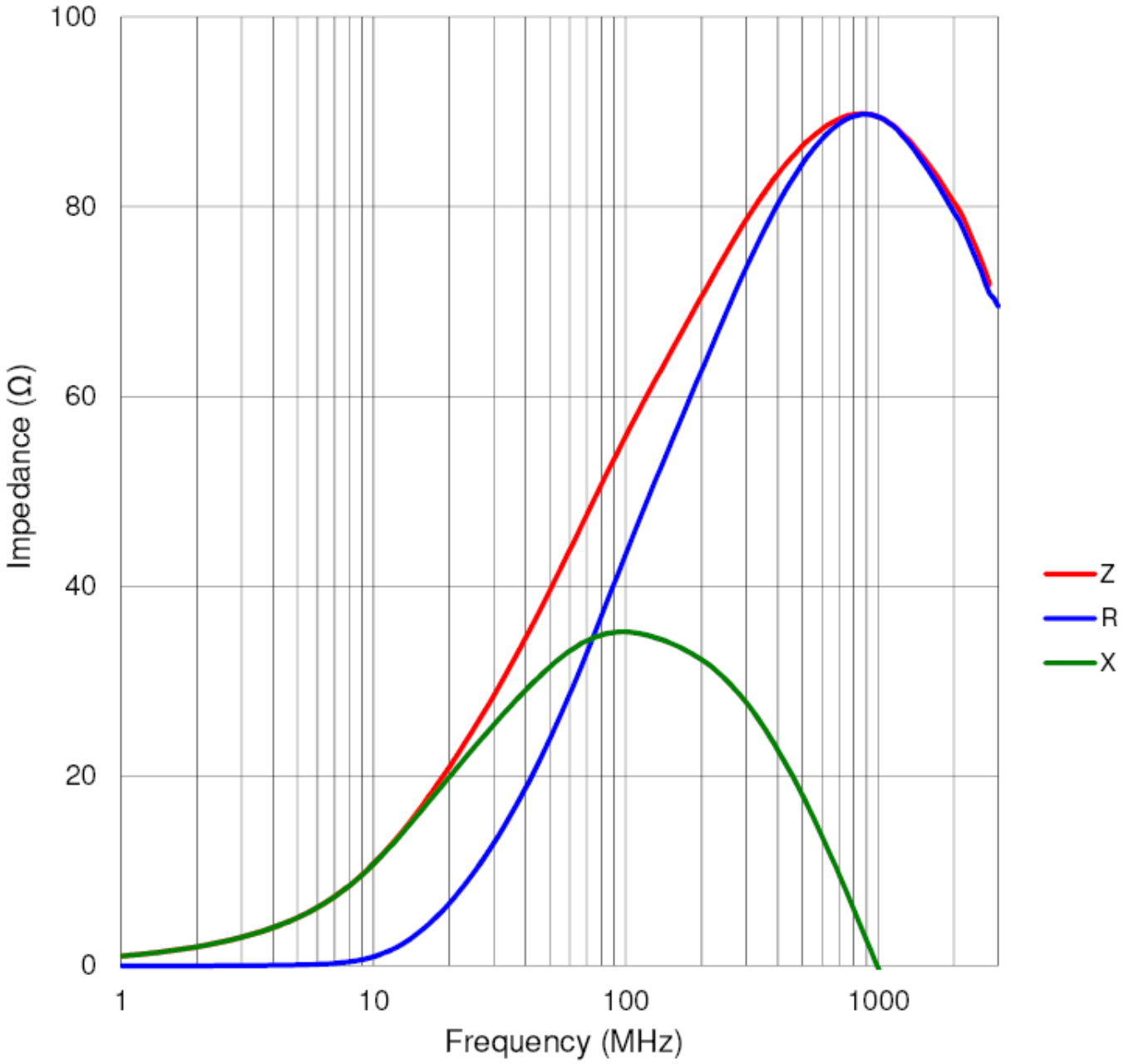
Part Number	Impedance(Ω)	Test Freq.	DCR MAX. (Ω)	Idc MAX. (A)
YI403023U560-10R0T	56±25%	100 MHz	0.004	10.0

TEST INSTRUMENTS：

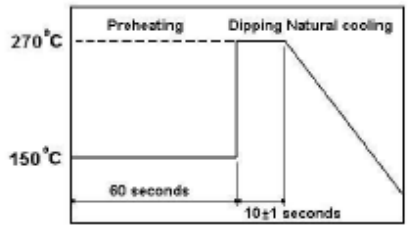
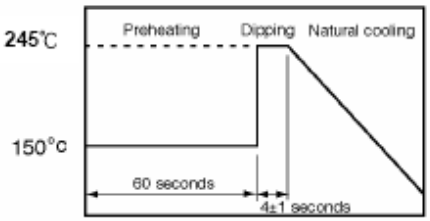
HP 4338A MILLIOHMMETER

HP 4291B RF IMPEDANCE/MATERIAL ANALYZER

■ Impedance VS. Frequency characteristic



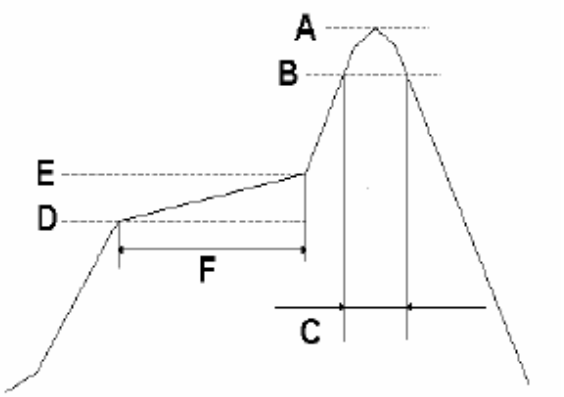
■ Reliability test

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 

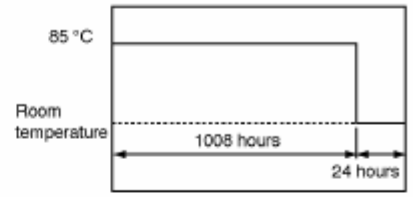
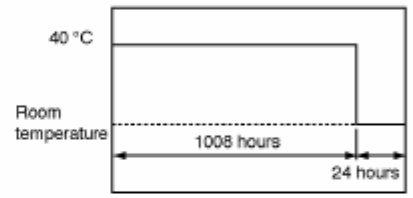
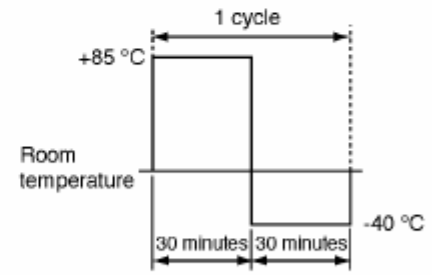
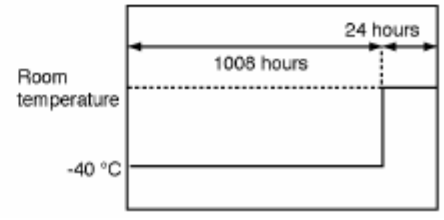
Recommended Soldering Conditions

(REFLOW TEMPERATURE PROFILE) Lead-Free

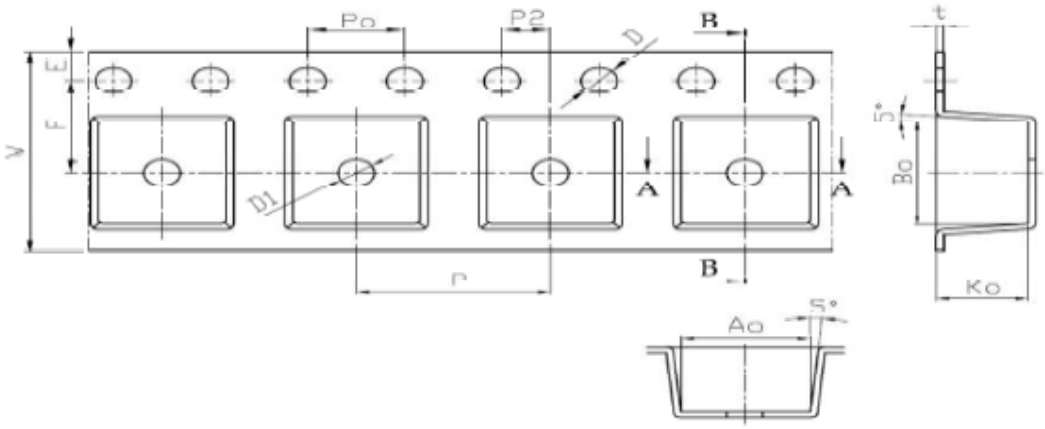
A	260 ± 5℃
B	230 ± 5℃
C	30 ±10 sec
D	150℃
E	180℃
F	90 ± 30sec



■ Reliability test

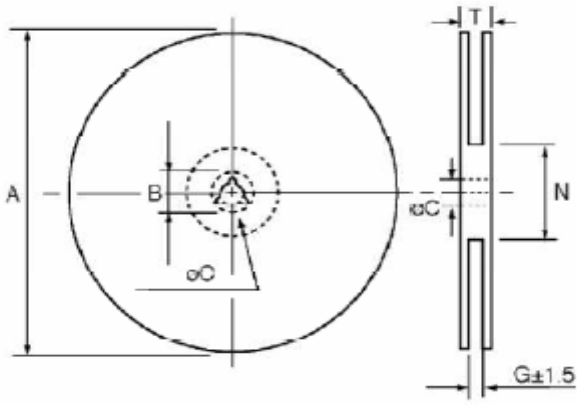
Item	Performance	Test condition
High temperature resistance	Appearance: Ferrite shall not be damaged. Impedance: Within±20% of the initial value.	Temperature: 85±2℃ Testing time: 1008±12 hours Measurement: After placing for 24 hours min. 
Humidity resistance	Appearance: Ferrite shall not be damaged. Impedance: Within±20% of the initial value	Humidity: 90 to 95% RH Temperature: 40±2℃ 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℃, +85℃, 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℃ Testing time: 1008±12 hours Measurement: After placing for 24 hours min. 

■ Taping Dimensions(Unit:mm)



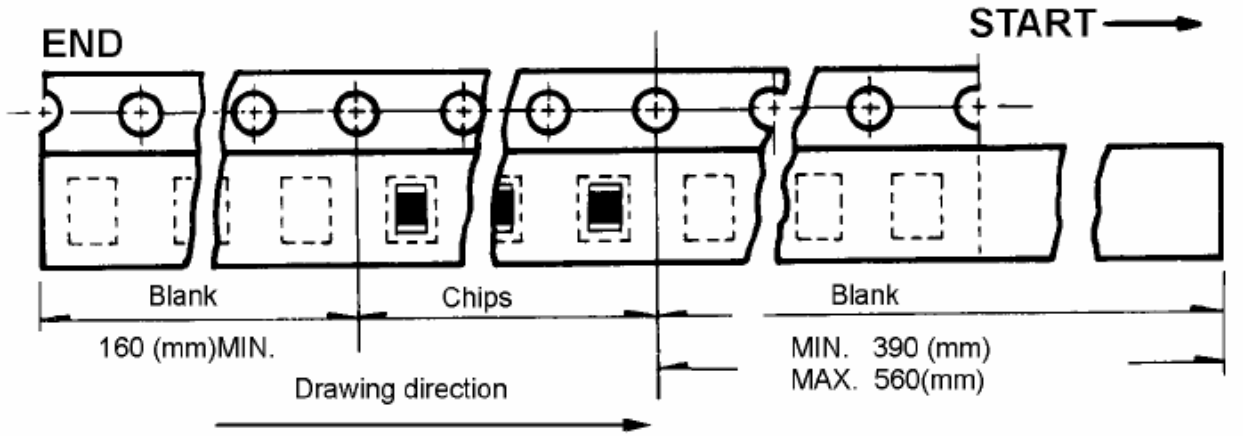
Carrier tape material : Polystyrene (Dimensions in m/m)													
TYPE	W	P	E	F	D	D1	P0	P010	P2	A0	B0	K0	t
403023	12.00 ±0.10	8.00 ±0.10	1.75 ±0.10	5.50 ±0.05	1.50 +0.1/-0	1.50 ±0.10	4.00 ±0.10	40.0 ±0.20	2.00 ±0.05	3.30 ±0.10	4.40 ±0.10	2.50 ±0.10	0.26 ±0.05
453223	12.00 ±0.10	8.00 ±0.10	1.75 ±0.10	5.50 ±0.05	1.50 +0.1/-0	1.50 ±0.10	4.00 ±0.10	40.0 ±0.20	2.00 ±0.05	3.57 ±0.10	4.80 ±0.10	2.80 ±0.10	0.30 ±0.05
565015	12.00 ±0.10	8.00 ±0.10	1.75 ±0.10	5.50 ±0.05	1.50 +0.1/-0	1.50 ±0.10	4.00 ±0.10	40.0 ±0.20	2.00 ±0.05	5.25 ±0.10	6.05 ±0.10	1.80 ±0.10	0.30 ±0.05
565018	12.00 ±0.10	8.00 ±0.10	1.75 ±0.10	5.50 ±0.05	1.50 +0.1/-0	1.50 ±0.10	4.00 ±0.10	40.0 ±0.20	2.00 ±0.05	5.25 ±0.10	6.05 ±0.10	2.00 ±0.10	0.30 ±0.05
565020	12.00 ±0.30	8.00 ±0.10	1.75 ±0.10	5.50 ±0.10	1.50 +0.1/-0	1.50 ±0.10	4.00 ±0.10	40.0 ±0.20	2.00 ±0.10	5.35 ±0.10	5.95 ±0.10	2.20 ±0.10	0.26 ±0.05
565030	12.00 ±0.10	8.00 ±0.10	1.75 ±0.10	5.50 ±0.05	1.50 +0.1/-0	1.50 ±0.10	4.00 ±0.10	40.0 ±0.20	2.00 ±0.05	5.25 ±0.10	6.15 ±0.10	3.20 ±0.10	0.30 ±0.05
565032	12.00 ±0.10	8.00 ±0.10	1.75 ±0.10	5.50 ±0.05	1.50 +0.1/-0	1.50 ±0.10	4.00 ±0.10	40.0 ±0.20	2.00 ±0.05	5.25 ±0.10	6.15 ±0.10	3.40 ±0.10	0.26 ±0.05
565036	12.00 ±0.30	8.00 ±0.20	1.75 ±0.10	5.50 ±0.10	1.50 +0.1/-0	1.50 ±0.10	4.00 ±0.10	40.0 ±0.20	2.00 ±0.10	5.25 ±0.10	6.15 ±0.10	3.80 ±0.10	0.35 ±0.05
853023	16.00 ±0.30	8.00 ±0.10	1.75 ±0.10	7.50 ±0.10	1.50 +0.1/-0	1.50 ±0.10	4.00 ±0.10	40.0 ±0.20	2.00 ±0.10	3.30 ±0.10	8.70 ±0.10	2.50 ±0.10	0.30 ±0.05

■ Reel Dimensions(Unit:mm)



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