

3-terminal Filters

For Large-current Power Line

YFF-HC Series

Type: **YFF31HC** **3216 [1206 inch]* Feed through filter**

* Dimensions Code JIS[EIA]

○ All specifications are subject to change without notice.

○ Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

3-terminal Filters

Conformity to RoHS Directive
Lead-free Compatible

For Large-current Power Line

Overview of YFF-HC Series

FEATURES

- Small and high-performance EMC components.
- Good attenuation characteristic in a wide band range.
- For large current (6A to 10A) applications.

APPLICATIONS

Power line of AV (LCD, PDP) products and information products (PC, server).
Countermeasures against power-supply noise of communications infrastructure PA.

PART NUMBER IDENTIFICATION

YFF	31	HC	2A	105	M	T	□□	0	N					
Series name	L×W dimensions		Product internal code		Rated voltage		Capacitance		Tolerance	Taping	TDK internal code	Reel size		Internal electrode Ni
	Code	mm	Code		V	Code	pF	Code				mm		
	31	3.2×1.6	HC	Large current	1H	50	105	1,000.000 (1.0μF)				M	±20%	
				2A	100							9	ø330	

PACKAGING STYLE AND SPECIFICATIONS

Type	Package quantity (piece/reel)		Single weight (g)
	ø178	ø330	
YFF31HC	2,000	10,000	0.0342

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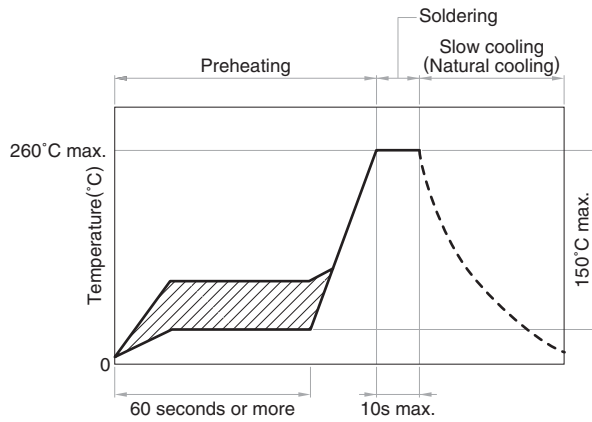
○ Please contact our Sales office when your application is considered the following:
The device's failure or malfunction may directly endanger human life (e.g. application for automobile/aircraft/medical/nuclear power devices, etc.)

○ All specifications are subject to change without notice.

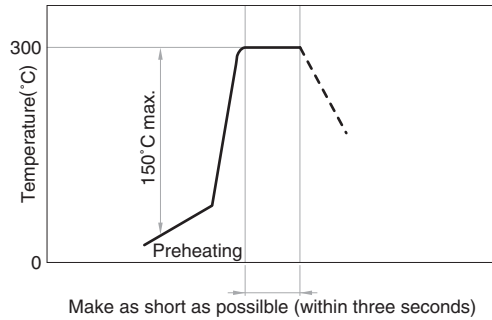
Overview of YFF-HC Series

RECOMMENDED SOLDERING CONDITION

REFLOW SOLDERING



HAND SOLDERING

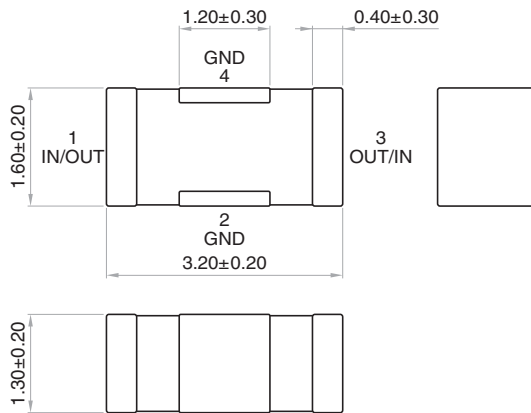


PRECAUTIONS FOR USE

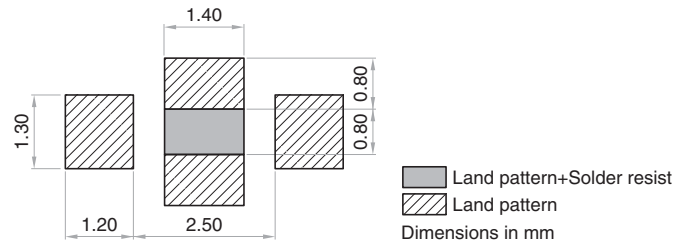
- Before soldering, be sure to preheat components. The ΔT preheating temperature must be 150°C max. with attention paid to thermal shock.
- Natural cooling of components in the air is recommended. On the other hand, when dipping them in a solvent for purposes, such as cleaning, make sure that the temperature difference (ΔT) is 100°.
- When performing hand soldering for circuit modification, apply the soldering iron to the copper foil area of the printed circuit board for 3 seconds or less. The temperature of the iron tip should not exceed 300°C.
- Use a wrist band to discharge static electricity in your body through the grounding wire.
- When incorporating the printed circuit board on which this product is mounted into a frame, etc., do not apply stress to the product through local bending of the board by tightening of screws, etc.

YFF-HC Series YFF31HC Type(Feed Through Filter)

SHAPES AND DIMENSIONS



RECOMMENDED LAND PATTERN



* Make sure to connect the GND terminal of this product and the GND of the mounting circuit board by using through holes so that the distance between them is the shortest.

ELECTRICAL CHARACTERISTICS

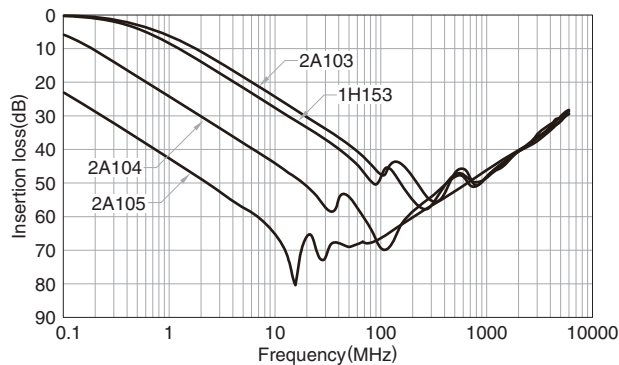
CHARACTERISTICS SPECIFICATION TABLE

Part No.	Capacitance (μF)	Tolerance (%)	Rated voltage E _{dc} (V)	Rated current I _{dc} (A)	Operating temperature range (°C)	Storage temperature range(After mount) (°C)
YFF31HC2A105MT00□N*	1	20	100	6	-55 to +125	-55 to +125
YFF31HC2A104MT00□N	0.1	20	100	10	-55 to +125	-55 to +125
YFF31HC2A103MT00□N	0.01	20	100	10	-55 to +125	-55 to +125
YFF31HC1H153MT00□N	0.015	20	50	10	-55 to +125	-55 to +125

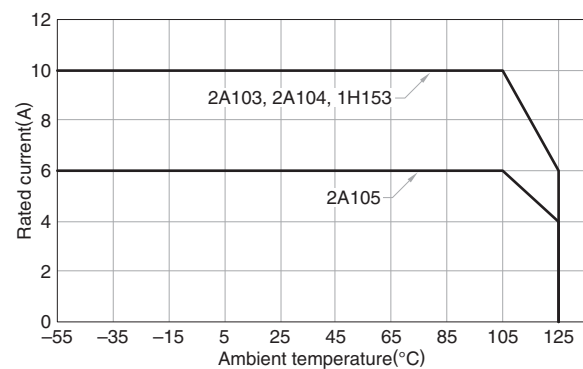
* □: Please specify reel size code, 0 (ø178) or 9 (ø330)

ELECTRICAL CHARACTERISTICS GRAPH (EXAMPLE)

INSERTION LOSS vs. FREQUENCY CHARACTERISTICS

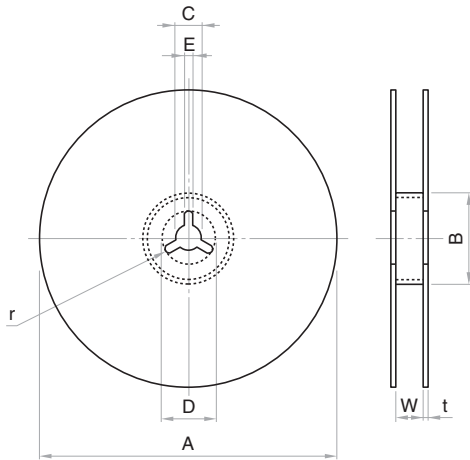


RATED CURRENT vs. TEMPERATURE CHARACTERISTICS (DERATING)



YFF-HC Series Packing Style

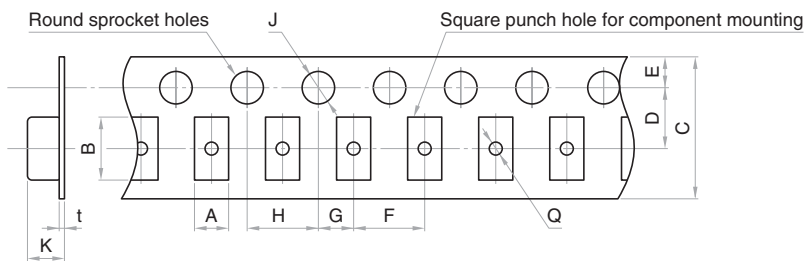
REEL DIMENSIONS



Dimensions in mm

Reel	A	B	C	D	E	W	t	r
ø178	ø178±2.0	ø60±2.0	ø13±0.5	ø21±0.8	2.0±0.5	9.0±0.3	2.0±0.5	1.0
ø382	ø382 max.(ø330 nom.)	ø50 min.	ø13±0.5	ø21±0.8	2.0±0.5	10.0±1.5	2.0±0.5	1.0

TAPE DIMENSIONS



Dimensions in mm

Type	A	B	C	D	E	F	G	H	J	K	t	Q
YFF31HC	1.90 typ.	3.50 typ.	8.00±0.30	3.5±0.05	1.75±0.10	4.00±0.10	2.0±0.05	4.00±0.10	ø1.5+0.10/-0	2.50 max.	0.30 max.	ø0.50 min.