

## 《 New foils for Anode, Low voltage 【U199】 【U191】 》

Thank you very much for using our products at all times.

This is to introduce you our new foil 【U199】 and 【U191】 for Low voltage Anode foil that are used 「New Technology」. Please compare this new foil with the foils currently in-use, and please give us your comments and suggestions.

### 1. New Technology 「F Tech」.

Our New Technology 「F Tech」 makes it possible to produce smooth.

Because, it avoids stress concentration in winding capacitor.

And, it becomes suppressed to crack in winding. Then it has possibilities it to become suppressed current of aging.

This Technology is helpful to become usable on High capacitance and High Voltage foils.

「F Tech」 has a international patent pending.

### 2. New foils

#### ① Characteristics of the new foils

Nominal Formation Voltage Range : 8.0~65.5Vfs

i) 【U199】 is treated 「F Tech」 base on 【U179H】

It is expand maximum Vfs from 39.6 to 65.5.

ii) 【U191】 has higher capacitance than that of 【U199】.

iii) 【U199】 and 【U191】 are shrunked in forming. Because, 【U199】 and 【U191】 have high capacitance.

Then, effective width is changed in Vfs that on selling by formed foils.

iv) 【U199】 and 【U191】 don't have specification of Bending Strength.

Because, it is incommensurable with Bending Strength.

【U199】 and 【U191】 are became limber by 「F Tech」.

#### ② Specifications of Etched foils (tentative)

Vfs	Capacitance [ $\mu\text{F}/\text{cm}^2$ ]		
	U191	U199	U179H
20.5	129	124	126
65.5	28.4	26.8	-
Gauge [ $\mu\text{m}$ ]	120	120	120
Tensile Strength [N/cm]	$\geq 16.7$	$\geq 17.2$	$\geq 22.7$
Bending Strength(R=0.5) [bend]	-	-	$\geq 50$

注)-1 Capacitance Tolerance: +10, -5%.

注)-2 Gauge Tolerance:  $\pm 10\%$ .

注)-3 Other specifications are in accordance with F-160

#### ③ Specifications of formed foils (tentative)

Vfs	Capacitance [ $\mu\text{F}/\text{cm}^2$ ]		
	U191	U199	U179H
8.0	282	271	275
12.8	191	184	187
20.5	129	124	126
32.9	77.0	73.7	74.8
35.8	68.6	65.6	66.6
45.6	49.2	46.9	-
50.2	42.7	40.6	-
65.5	28.4	26.8	-
Gauge [ $\mu\text{m}$ ]	120	120	120
Tensile Strength [N/cm]	$\geq 16.7$	$\geq 17.2$	$\geq 22.7$
Bending Strength [bend]	-	-	$\geq 50$

注)-1 Capacitance Tolerance: +10, -5%.

注)-2 Gauge Tolerance:  $\pm 10\%$ .

注)-3 Other specifications are in accordance with F-160

Effective width

Part Number	Effective width : 480mm		Effective width : 475mm	
	Lower Vfs	Upper Vfs	Lower Vfs	Upper Vfs
U199	8.0	49.2	50.2	65.5
U191	8.0	43.5	45.6	65.5

【U199】 and 【U191】 have high capacitance and high voltage.

Then, it is possible to develop of new products and reduce size in-line products.

The above foil samples for evaluation are available.

If you have an interest in our new foil, please feel free to contact us.

The above specifications are subject to change without notice.