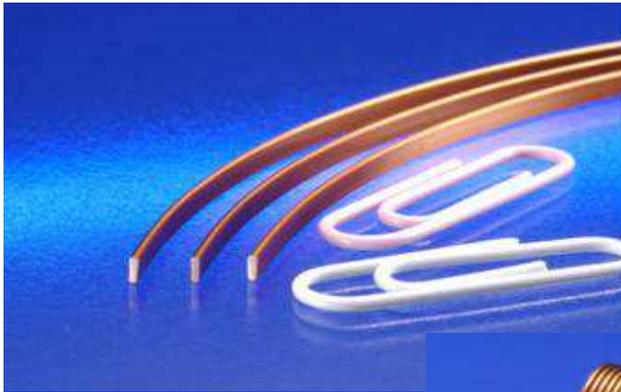


FINE FLAT ENAMELLED WIRE

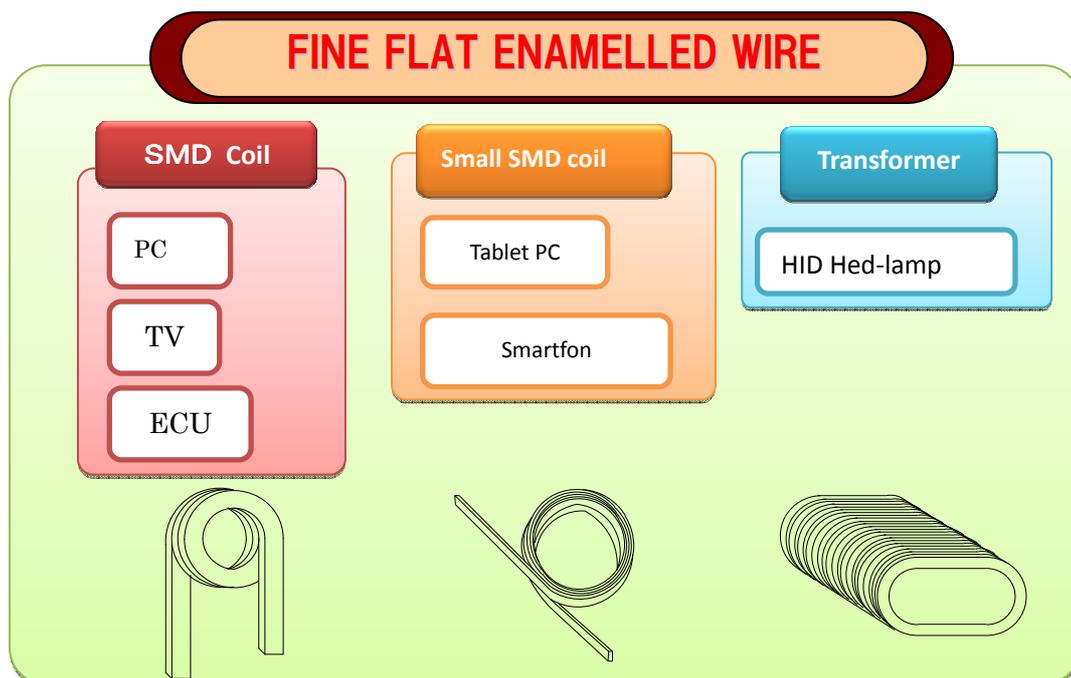


FINE FLAT ENAMELLED WIRE, what is it?

Customer has requested that to be more efficient in using space, high electricity and density in the developing stage of the high spec and quality coil. We, Unimac Japan have developed this product successfully by using the above the requirements. The property of our flat magnet wire outweighs the round wire which is from 0.07mm to 1.7mm in a cross section, and the flat wire's conductor was insulated accordingly. It will give you a wide-range of possibility on your products. In addition, it will contribute to the minimization of volume, weight reduction and enhance the electrical efficiency on our product.

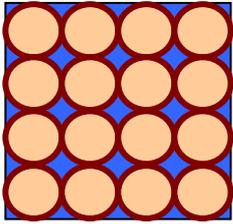
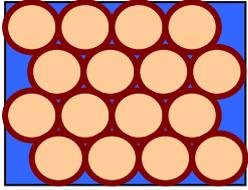
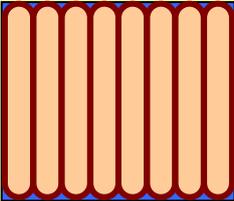


USE

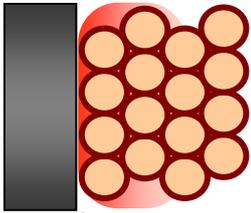
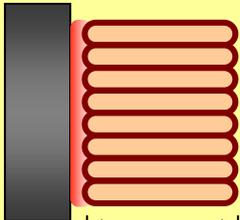


Advantage of our products.

• Fine flat wire gives you more efficient space and electrical power rather than that of the general round wire.

Round Wire[Bale form]	Round Wire[full align]	Fine flat wire
		
About 75%	About 83%	87% or more !!

• The heat dissipation of the coil made by fine flat wire is much better than that made by round wire, because the difference in temperature is small between the internal and external parts of the coil.

Round Wire	Fine flat wire
	
Temperature difference large	Temperature difference small

• Fine flat wire will enable you to design the coil which holds efficient magnet field because of the excellence of frequency characteristics.

□ Features on our products.

- (1) The characteristic of insulation resistance on the corner of coil is much better than its of the general made manufacturing processes.
- (2) We are able to manufacture the products which hold the properties of the heat resistance(from 155°C to 220°C) by using a wide-range materials.
- (3) We are able to provide the wires put the soldering on the surface of conductor. The heat-resistant temperature on insulator film: 155°C
- (4) We are able to provide the solderable enameled wire.
- (5) We are able to provide the products in accordance with the UL. (Our brand name is SFT-AIWU)

【Comparison of isolation Corner】

Our recipe	General recipe
	
	

Varieties

□Our products feature [standard]

	SFT type		【Ref.】 General flat wire
	Fine flat wire	Ultra-fine flat wire	
Equivalent diameter round wire (mm)	0.31~1.7	0.07~0.3	1.8~8.0
ratio conductor	1:1.5~1:20	1:1.5~1:10	1:2.0~1:10
Minimum conductor thickness (mm)	0.08	0.02	0.08
standard coating thickness (mm)	0.020	0.005	0.050
Insulation resin	Modified-polyester Polyamide-imide etc.	Modified-polyester Polyamide-imide etc.	Folmal Polyester Polyamide-imide
Selfbonding-wire	○	○	(○)

□Standard type

Insulation	Thermal index	Self-bonding layer	
		No	Yes
Modified-polyester(soluderble)	155°C	SFT-FH	SFT-BH-N1
Polyamide-imide	220°C	SFT-AIW SFT-AIWU*1 SFT-AIW40K*2	SFT-BA-NV SFT-BA-NS*3

*1 This item complies with UL standard.

*2 This item is corresponds to metal powder composite

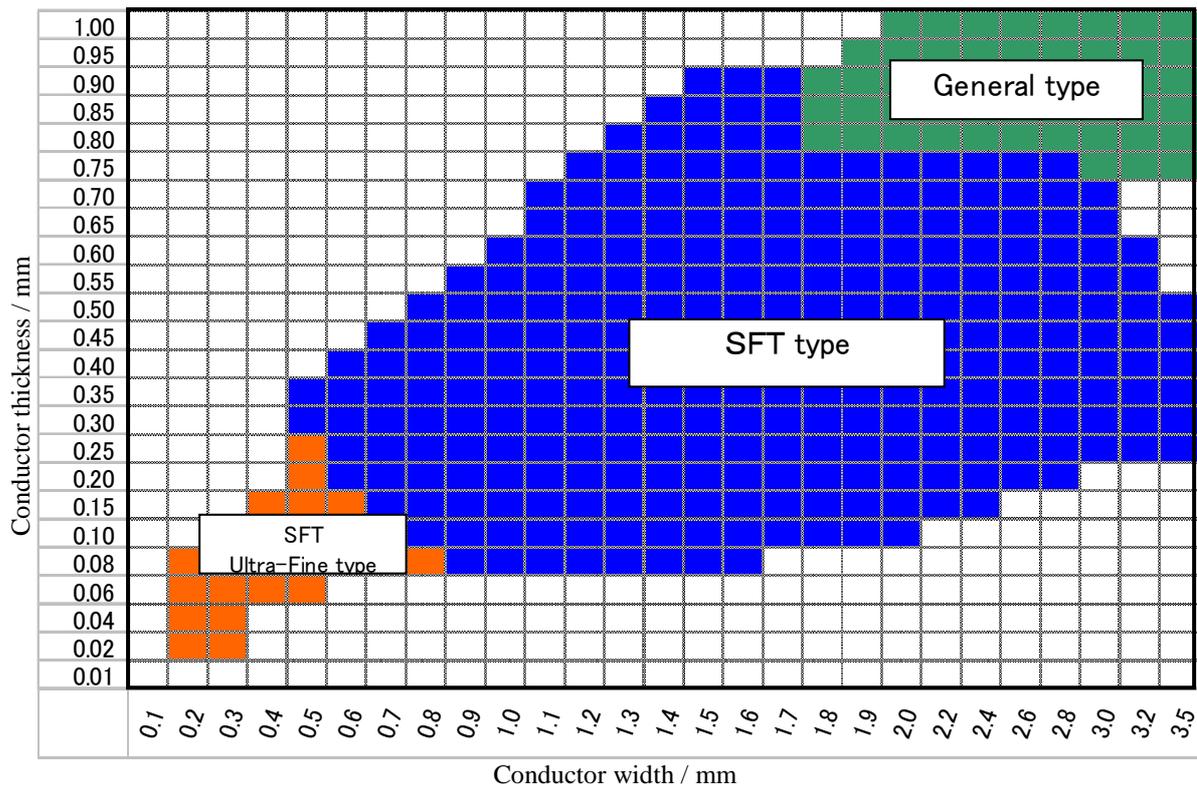
*3 This item is high heat resistance thermosetting type

□Representative characteristic example

		SFT type					
		Fine flat wire				Ultra fine flat wire	
Insulating resin		Modified polyester		Polyamideimide		Polyamideimide	
Index		SFT-FH	SFT-BH-N1	SFT-AIWU	SFT-BA-NV	SFT-BA-NV	
Size(mm)		0.14×2.0	0.70×2.0	0.10×2.0	0.70×3.0	0.02×0.3	0.10×0.6
conductor (mm)	Thickness	0.140	0.700	0.100	0.700	0.020	0.100
	Width	2.00	2.00	2.00	3.00	0.30	0.60
Insulationfilm (mm)		0.015	0.017/0.004	0.015	0.020/0.002	0.005/0.002	0.005/0.002
Outside (mm)	Thickness	0.170	0.742	0.130	0.744	0.034	0.114
	Width	2.03	2.04	2.03	3.04	0.32	0.62
B.D.V.(kV)		1.5	3.0	3.0	3.5	0.7	1.5
Conductor resistance (Ω/km)		63.90	14.00	92.30	8.50	3200	310
Elongation(%)		35.0	25.0	35.0	35.0	25.0	25.0
Solderbility		430°C×3sec	430°C×3sec	—	—	—	—
Stickness (N)		—	5.0	—	8.0	0.6	1.2

* This figure is just for reference.

Manufacturing range



Packing

Shapes	Sign	Flange D (mm)	Barrel d (mm)	Inside W (mm)	Flange thickness a (mm)	Shaft hole h (mm)	mass (kg)	Quantity standard (kg)	Applied varieties
	P-5	160	100	90	12	20	0.35	5	Fine-flat General
	P-10	200	90	108	12	25	0.5	10	General
	P-30	300	130	130	15	30	1.3	30	General

Contact Us

■Tokyo salesG

Shiroyama trust tower,3-1,Toranomon 4-chome,
Minato-ku,Tokyo,105-6013,Japan

TEL 03-5733-2132
FAX 03-5733-2133

■West salesG

1-13-26,Nishiki,Naka-ku,Nagoya-city,
Aichi-ken,460-0003,Japan

TEL 052-219-8160
FAX 052-201-9556

■Engineering Dept.

1326-1,Oda,Hokusei-cho,Inabe-gun,Mie-ken,
511-0427,Japan

TEL 0594-72-3114
FAX 0594-72-6452