

# Polyurethane Wire Enamel (PU)

## 聚氨酯漆包線漆

Product	Viscosity		Solid Content		Characteristics And Applications	Conductor Diameter	Film Thickness	Heat Shock		Cut Through	Breakdown Voltage	Flexibility		Solderability Temperature	Solderability Time	Tanδ	Thermal Index	UL File No. E173840
產品名稱	粘度		固體含量 (%)		特性及應用	裸線直徑	漆膜厚度	耐熱衝擊		軟化擊穿	擊穿電壓	柔韌性		焊錫溫度	焊錫時間	介質損耗	耐熱指數	UL 認證號碼 E173840
	Ford cup (#4)	Brookfield type	120°C ×3hr×1.2g	180°C ×1hr×1.0g		mm	µm	x d	°C	°C	kV	%	x d	°C	sec	°C	°C	
	sec 25°C	mPa·s 30°C				mm	µm	x d	°C	°C	kV	%	x d	°C	sec	°C	°C	
TPU F2 30NC	20±5	36±10	30.0±1.0	25.0±1.5	作業性、經時針孔、直焊性佳 Excellent workability and solderability, pinhole free.	0.30	35	6	175	245	9.2	20	1	360	2	150	130	v
TPU F2 35NC	28±5	60±10	35.0±1.0	29.0±1.5		0.50	43	6	175	245	10.0	20	1	360	2	150	130	
TPU F2 40NC	55±10	120±30	40.0±1.0	33.0±1.5		0.15	34	3	175	237	8.7	20	1	360	1	150	155	
FPU 28L	17±5	25±5	28.0±1.0	24.0±1.5	細線或絞線使用，作業性、直焊性佳、低焊渣 For fine wire or litz wire, excellent workability and solderability with less solder slag.	0.15	34	3	175	237	8.7	20	1	360	1	150	155	v
FPU 30L	19±5	30±10	30.0±1.0	26.0±1.5		0.15	33	3	175	229	8.1	20	1	360	1	150	155	
FPU 35L	28±5	60±10	35.0±1.0	30.0±1.5		0.15	32	3	175	235	8.3	20	1	360	1	160	155	
FPU 30LH	19±5	30±10	30.0±1.0	26.0±1.5	細線或絞線使用，作業性、直焊性佳、低焊渣；可高速化作業 For fine wire or litz wire, excellent workability and solderability with less solder slag. Also use for high speed machine.	0.15	33	3	175	229	8.1	20	1	360	1	150	155	v
FPU 35LH	28±5	60±10	35.0±1.0	30.0±1.5		0.15	32	3	175	235	8.3	20	1	360	1	160	155	
FPU 30LV	19±5	28±7	30.0±1.0	26.0±1.5		0.15	32	3	175	235	8.3	20	1	360	1	160	155	
FPU 35LV	28±5	50±10	35.0±1.0	30.0±1.5	細線或絞線使用，作業性、直焊性佳、低焊渣、水中針孔佳 For fine wire or litz wire, excellent workability and solderability with less solder slag. pinhole in water has fine performance.	0.15	32	3	175	235	8.3	20	1	360	1	160	155	-----
FPU 30EN	20±5	36±10	30.0±1.0	25.0±1.5	綠色產品 (低臭味)、作業性、直焊性 Environmental friendly product (low odor), excellent workability and solderability.	0.30	38	6	175	243	7.6	20	1	360	1	150	130	v
FPU 40EN	55±10	120±30	40.0±1.0	33.0±1.5		0.30	38	6	175	243	7.6	20	1	360	1	150	130	
FPU 38V	30±5	70±15	38.0±1.0	33.0±1.5		1.20	62	3	175	275	10.4	20	1	400	1	170	155	
FPU 55V	N/A	2000±400	55.0±1.0	47.0±1.5	大線使用，密著性、耐熱佳；環型線圈應用 Use for medium to large wire, excellent adherence and thermal resistance. Can be applied to toroidal coil.	1.20	62	3	175	275	10.4	20	1	400	1	170	155	v
FPU AK 28S	19±5	30±10	28.0±1.0	23.0±1.5	極細線專用、低溫直焊性佳 For super fine wire application, excellent low soldering temperature.	0.15	28	3	175	220	9.0	20	1	300	1.5	170	155	v
FPU AK 32	19±5	40±10	32.0±1.0	26.0±1.5	細線專用、低溫直焊性佳 For fine wire, excellent low soldering temperature.	0.15	21	2	175	227	6.7	20	1	320	1.5	170	155	v
FPU 35VN	24±5	50±10	35.0±1.0	30.0±1.5	耐熱衝擊、密著性、直焊性佳；耗漆量少、低臭味環保品 Excellent heat shock, excellent workability and solderability. Less consumption of coating, low odor, environmentally friendly.	0.30	28	3	175	248	7.4	20	1	360	1.2	170	155	v
FPU 38VN	31±5	75±15	38.0±1.0	32.0±1.5		0.30	28	3	175	248	7.4	20	1	360	1.2	170	155	
FPU 40VN	38±6	100±20	40.0±1.0	34.0±1.5		0.30	28	3	175	248	7.4	20	1	360	1.2	170	155	
FPU 50VK	150±20	400±100	50.0±1.0	43.0±1.5	高濃度低黏度，密著性、耐熱佳；環型線圈應用 High solid content with low viscosity, excellent adherence and thermal resistance. Can be applied to toroidal coil.	0.50	42	3	175	255	10.8	20	1	380	1	170	155	v
FPU A1 30E	19±5	30±10	30.0±1.0	25.0±1.5	絞線用、水中針孔、水中耐電壓、直焊性佳 For litz wire, excellent solderability, pinhole and BDV test in water has fine performance.	0.15	25	3	175	253	8.9	20	1	340	2	170	155	v
FPU A1 35E	28±5	60±10	35.0±1.0	29.0±1.5		0.15	25	3	175	255	9.2	20	1	360	2	170	155	
FPU A1 30	19±5	30±10	30.0±1.0	26.0±1.5		0.30	35	3	175	260	8.7	20	1	360	2	170	155	
FPU A1 35	28±5	60±10	35.0±1.0	30.0±1.5	耐熱性、作業性、針孔性、直焊性佳 Excellent thermal resistance, workability, solderability and pinhole free.	0.15	25	3	175	255	9.2	20	1	360	2	170	155	v
FPU A1 40	55±10	120±20	40.0±1.0	34.0±1.5		0.30	35	3	175	260	8.7	20	1	360	2	170	155	
FPU A1 45	105±15	300±50	45.0±1.0	39.0±1.5		0.30	35	3	175	260	8.7	20	1	360	2	170	155	
FPU A5 30	20±5	36±10	30.0±1.0	26.0±1.5	耐熱衝擊、耐軟化、直焊性佳 Excellent heat shock, solderability and high cut-through temperature.	0.30	41	2	200	265	10.5	20	1	360	2	200	155	v
FPU A5 35	28±5	60±10	35.0±1.0	30.0±1.5		0.30	41	2	200	265	10.5	20	1	360	2	200	155	
FPU A5 50	200±20	800±150	50.0±1.0	43.0±1.5		0.30	41	2	200	265	10.5	20	1	360	2	200	155	
FPU A7 35M	20±5	35±10	35.0±1.5	32.0±1.5	無酚系環保 PU、低煙道損失、多股絞線應用、低溫焊錫 E nvironmental Phenol-Free Enamel, less cleaning frequency on machine, Stranded wire application, low solderble temperture.	0.15	35	3	175	235	8.8	20	1	360	1	150	155	-----
FPH 130	25±5	50±10	30.0±1.0	26.0±1.5	高耐軟化溫度、高介質損耗、耐熱壽命佳，回流焊應用 High cut-through temperature, Tanδ, and excellent thermal endurance. Can be applied to reflow soldering process.	0.30	30	2	200	285	8.2	15	1	390	2	224	180	v
FPH 135	55±10	120±30	35.0±1.0	30.0±1.5		0.30	30	2	200	285	8.2	15	1	390	2	224	180	
FPH 230	20±5	36±10	30.0±1.0	26.0±1.5		0.30	30	2	200	270	7.9	15	1	390	1	195	180	
FPH 235	25±5	60±10	35.0±1.0	30.0±1.5	高耐軟化溫度、耐熱衝擊佳 High cut-through temperature, and excellent heat shock.	0.30	30	2	200	270	7.9	15	1	390	1	195	180	v
FPH 238K	38±6	100±20	38.0±1.0	32.0±1.5	作業性、耐熱性、可撓性、耐熱衝擊性 Excellent workability, thermal resistance, flexibility, and heat shock.	0.30	32	2	200	260	7.5	20	1	390	1	194	180	v
FPH 250K	200±20	800±150	50.0±1.0	43.0±1.5		1.20	43	2	200	263	8.6	20	1	390	2	196	180	
FPH 240FW	40±10	90±20	40.0±1.0	34.0±1.5		0.30	32	2	200	270	7.7	15	1	390	1	196	180	
FPH 250FW	200±20	800±150	50.0±1.0	43.0±1.5	扁平線專用、作業性佳 For rectangular wire, excellent workability.	0.30	32	2	200	270	7.7	15	1	390	1	196	180	v
FPH 330	20±5	36±10	30.0±1.0	26.0±1.5	高耐軟化溫度、高介質損耗、直焊性佳 High cut-through temperature, Tanδ, and excellent solderability.	0.30	30	3	200	275	8.0	20	3	370	1	227	180	v
FPH 335	30±5	70±10	35.0±1.0	30.0±1.5		0.30	30	3	200	275	8.0	20	3	370	1	227	180	
FPH 330L	20±5	36±10	30.0±1.0	26.0±1.5		0.15	30	3	200	260	7.2	20	3	370	1	185	180	
FPH 335L	30±5	70±10	35.0±1.0	30.0±1.5	低焊渣、直焊性佳 Less solder slag, and excellent solderability.	0.15	30	3	200	260	7.2	20	3	370	1	185	180	v
FPH 530S	20±5	40±10	30.0±1.5	26.0±1.5	FIW 應用、高耐軟化溫度、高介質損耗、直焊性佳 FIW Application, High cut-through temperaturer and TanD, excellent solderability.	0.30	30	3	200	280	8.0	20	3	380	2	220	180	-----
FPH 635	55±10	120±30	35.0±1.0	30.0±1.5	高耐軟化溫度、高 TAN D High cut-through temperaturer and high TanD,	0.30	45	3	200	295	7.5	20	3	420	1	210	180	v
FPH 730C	20±5	36±7	30.0±1.0	25.5±1.5	高耐軟化溫度、高介質損耗，電感應用 High cut-through temperature, high Tanδ. Can be applied to inductor.	0.10	20	3	220	285	8.9	20	3	420	2	255	200	-----
FPH 835	28±5	60±10	35.0±1.5	30.0±1.5	低焊渣、高耐軟化溫度、耐熱衝擊佳 Less solder slag, High cut-through temperature, and great heat shock.	0.30	30	2	200	255	7.9	15	1	370	1	185	180	-----
TSF 243SA-N	NA	1200±240	49.0±1.0	42.0±1.5	耐熱性、耐濕熱性、高 TAN D、FIW 應用 Excellent thermal resistance, Humidity and heat resistance, high TadD. For FIW Application.	0.50	45	3	200	263	9.4	15	1	380	1.5	213	180	v

※ 聚氨酯系列可製成自潤滑產品  
※ The PU series can be produced to self-lubricating products

※ 耐熱衝擊符合 NEMA 標準  
※ The heat shock test conform to the standard of NEMA