

**Customer:** 

P/N:

SPH-3-1234

# SPECIFICATION FOR UL1354-SX 1X40AWG

Customer Approval				

Prepared	Checked	Approved		
D. Dong	B. Wong	B. Wong		

## **Issue and Revision Record**

Rev.	Date	Revised Items	Prepared	Checked	Approved
0	Nov 16, 2006 Refer to SPH-3-801C and MC-suzhou082.		D. Dong	B. Wong	B. Wong

## LIST

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### 1. Scope:

This specification covers PFA insulated micro-coaxial cable for internal wiring of electronic equipment, such as LCD panel

[UL No./Rating: UL1354 / 80°C, 30V]

USE: Internal wiring of Class 2 Circuits of Electronic Equipment.

### 2. Construction:

Item		Unit	Spec. Value
Inner Conductor	Material		Tinned copper alloy
	AWG size		40
	Stranding	No./mm	7/0.03
	Dia.(approx)	mm	0.09
	Material		PFA
Insulation	Nom. Thickness	mm	0.075
Insulation	Dia.(approx)	mm	0.24
	Color		White
	Туре		Wrap (left-hand lay)
Outer Conductor	Material		Tinned copper
Outer Conductor	Strand	mm	0.032
	Dia.(approx)	mm	0.31
Shield	Material		Cu metalized polyester tape
Snieid	Dia.(approx)	mm	0.32
Jacket	Material		Polyester tape
	Nom. Thickness	mm	0.01
	Color		Blue
	Dia.(approx)	mm	0.35±0.03

### 3. Characteristics:

Test Item	Test Condition	Specified Value
Rating temperature	$^{\circ}\mathbb{C}$	80
Rating voltage	V	30
Inner conductor resistance(at 20°C)	$\Omega$ /km	Max.5000
Dielectric strength 1>		Withstand A.C.500V for 1 min
Insulation resistance (20°C) 1>	$\mathbf{M}\Omega$ -km	Min. 1,000
Characteristic impedance (at TDR)	Ω	50±3
Attenuation (at 10MHz)	dB/m	Nom. 0.5
Capacitance (at 1kHz)	PF/m	Nom. 100
Desquamation of jacket	-	50~250g/25mm
Flammability	-	VW-1
Allowable current (Ref.) 2>	А	0.4
Tensile strength (Ref.) 3>	N(kgf)	Nom. 9.8(1.0)

- 1> Applied between inner conductor and outer conductor.
- 2> Single coaxial cable in the air, at ambient temperature  $40^{\circ}\text{C}$ ,max. conductor temperature  $80^{\circ}\text{C}$
- 3> Single coaxial cable, L=100mm, v=20mm/min

## 4. Packing:

- 4.1 Unit length:
  - (1) Standard length with no splices: 1000m/reel
  - (2) Min. length with no splices: 400m/reel
- 4.2 Package:

Plastic reel (code:P-3A) into carton box.

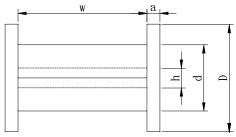


Fig.1 Dimension of plastic reel (P-3A)

(Unit:mm)

Code	D	d	w	а	h
P-3A	130	60	90	10	25

### 5. Cable Marking:

None.

### 6. Cable illustration:

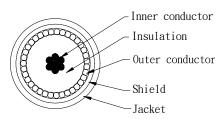
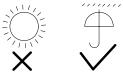


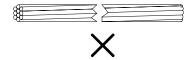
Fig.2 Cross-section of cable

## 7. Notice of application:

7.1 Please store the cable in the dry and cool place



- 7.2 When using the cable, be care not to break it because the cable is very thin and small
- 7.3 When peeling the insulation, please be care of not breaking the inner conductor



7.4 When assembling suggest the tinned plated conditions as follows:

240±5°C, M705E SN, JAMCO-325 flux, 2~3s

And do not immerge the insulation and jacket into tin. Because too high temperature and too long time will cause the insulation and jacket softening and shrinking

- 7.5 When assembling please do not damage the insulation, otherwise short circuit between inner conductor and outer conductor will be caused
- 7.6 Please don't use some organic compound wash the cable
- 7.7 The material of insulation is Teflon PFA. The high and long time using temperature of it is  $260^{\circ}$ C. And it will melt at about  $301^{\circ}$ C, and will decompose at about  $370^{\circ}$ C. Please notice these
- 7.8 When tearing the bag, please do not use the sharp tools to avoid damaging the cable in the bag.



## 8. Attached files:

## Material Safety Data Sheet

Shin Din Cable, Ltd. Date: Nov.16, 2006

1. Product and Company identification:

Product name: UL1354-SX 1X40AWG Micro-coaxial Wire

Company name: Shin Din Cable, Ltd.

Address: Pak Mong, Xili, Nanshan, Shenzhen city, China Responsible person: B. Wong/Engineering Department

Fax No.: 86-755-2765 3333 Tel No.: 86-755-2765 3459

## 2. Composition/Information on ingredient:

Single substance or mixture: Mixture

Conductor: Tinned plated copper alloy, tinned plated copper

Insulation: PFA, Cu metalized polyester tape and blue polyester tape

#### 3. Hazard identification:

Do not discharge into the environment;

 When this product is heated for a long time or at higher temperature, it generates particulate matter or hazardous fume gas.

### 4. First-aid measures:

Inhalation:

In case of headache and nausea, remove the victim from contamination immediately to fresh air, keep quiet and seek medical advice.

Skin contact:

No hazards.

- Eyes contact:

No hazards.

- Ingestion:

Rinse mouth. Get medical attention.

## 5. Fire fighting measures:

General Information:

In case of fire in surrounding area, shut off the source of origin of fire. Wear full protective equipments, fire-fighting clothes, with full-masked air respirator for fire-fighting operation.

Extinguishing Media:

Use any type of extinguisher, like foam, dry powder, carbon dioxide and dry sand.

## 6. Accidental release measures:

Collect wasted wire and bury it. Do not burn with incinerator.

### 7. Handling and storage:

- Handling:

"No smoking" practice should be maintained in a work place and after handling materials, wash face

and hands thoroughly. Cigarettes are not carried into a work place so that materials may not adhere to

there.

Storage:

Store in a cool, dry area, away from direct heat or sunlight.