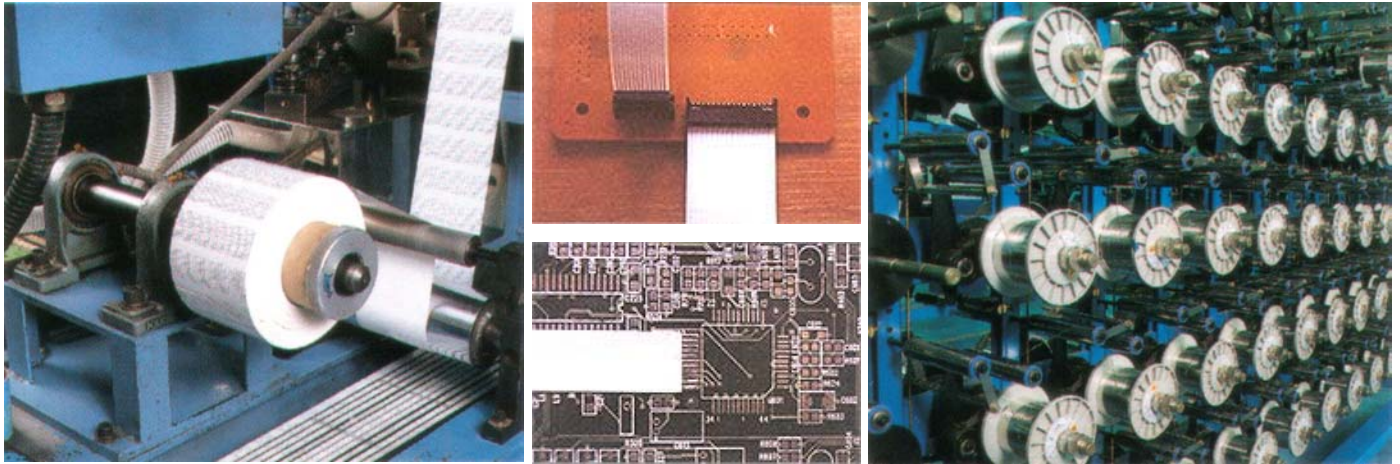


# *Flat Flexible Cable*

Our Flat Flexible Cable ( FFC ) offers great advantages in th design and manufacture of electronic devices and equipments.



## **EASY TO USE**

- Insertion to FFC connector
- Solder-type for solder to PCB

## **FLEXIBLE AND BENDABLE**

- Connecting of Electronic Circuits with Moving Parts

## **MINIATURE**

- Fine Pitch and Paper-Thin Body

## **RELIABLE**

- UL Approve
- FFC can tolerate 10 millions slides

## **VERSATILE**

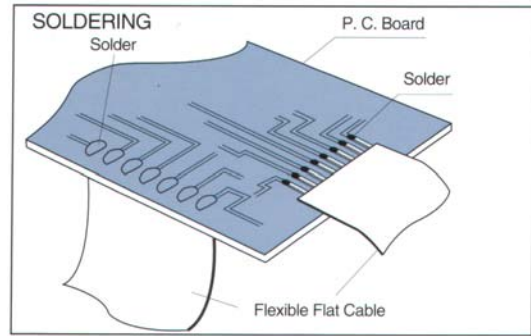
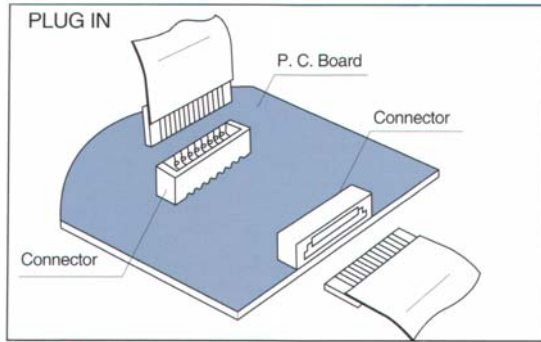
- Choices of
  - No. of Conductors
  - Pitch
  - Conductor Size
  - Strip Length
  - Supporting Tape Length
- Folding to Suit Layout

## **EASY LOGISTIC**

- Easy to Storage and Transportation due to Light Weight and Small Volume

## **LOW COST**

- A Cost Effective Solution for Interconnection

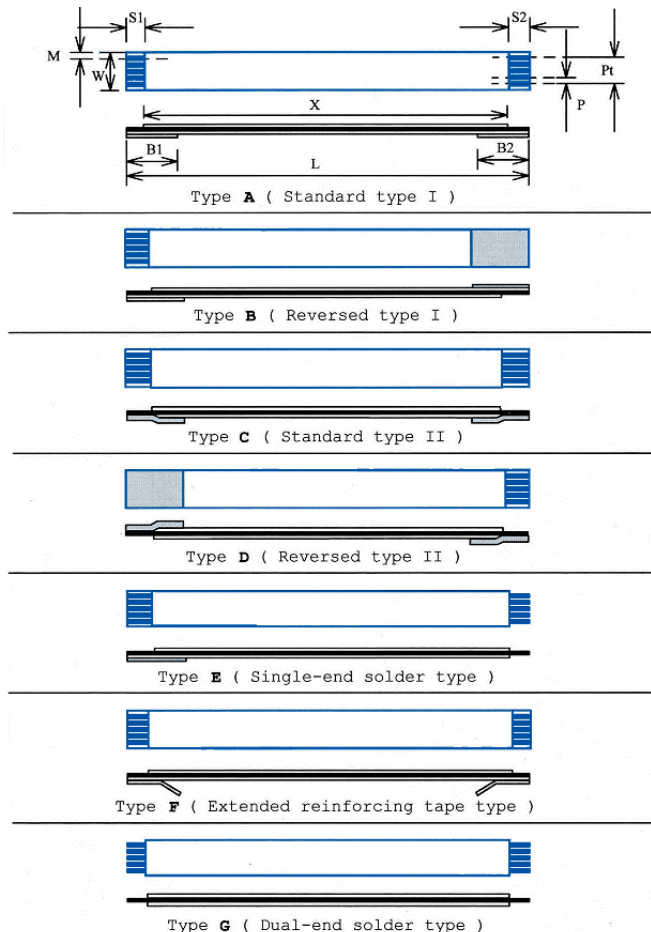


**\* APPLICABLE UL NO.**

UL NO.	VOLTAGE RATING	OPERATING TEMPERATURE	FILE NO.
UL 20798	60V	80 °C	E 188165
UL 20861	60V	105 °C	E 146835

**\* SELECTION GUIDE FOR CONDUCTORS (unit : mm)**

PITCH		0.5	1.0	1.25	2.54
CONDUCTORS FOR TYPE A, B, C, D, E, F	Thickness	0.035	0.1 0.035	0.1 0.05	0.1
	Width	0.3	0.7	0.8	0.8 1.27
CONDUCTOR FOR TYPE G	Thickness	-	- 0.1 (PBW)		-
	Width	-	- 0.5 (PBW)		-



# SPECIFICATION

( N=NO. OF conductors )

Item	Pitch=0.5mm	Pitch=1.0mm	Pitch=1.25mm	Pitch=2.54mm
Insulation material	Flame retardant polyester ( white )			
Conductor material	Tin or solder plated flat rectangular copper wire			
Conductor size (mm)	0.035x0.3	0.035x0.7	0.1x0.7	0.05x0.8
Max. conductor resistance, $\Omega$ /mm	1.5	0.85	0.3	0.52
Total length, L (mm)	25 to 1,000			
Total length tolerance (mm)	25 to 100 $\pm$ 3			
	101 to 300 $\pm$ 5			
	301 to 600 $\pm$ 10			
	601 to 1,000 $\pm$ 20			
Pitch tolerance (mm)	$\pm$ 0.03	$\pm$ 0.08	$\pm$ 0.1	$\pm$ 0.1
Total Pitch, Pt (mm)	$0.5 \times (N-1) \pm 0.03$	$1.0 \times (N-1) \pm 0.15$	$1.25 \times (N-1) \pm 0.15$	$2.54 \times (N-1) \pm 0.15$
Total width, W (mm)	$0.5 \times (N+1) \pm 0.07$	$1.0 \times (N+1) \pm 0.12$	$1.25 \times (N+1) \pm 0.2$	$2.54 \times (N+1) \pm 0.2$
Margin width, M (mm)	$0.5 \pm 0.1$	$1.0 \pm 0.15$	$1.25 \pm 0.2$	$2.54 \pm 0.2$
Terminal thickness, t (mm)	$0.3 \pm 0.05$			
Strip length, S (mm)	3,4,5,6 $\pm$ 1			
Reinforcing tape length, B (mm)	5,6,8,10,15,20 $\pm$ 1			
UL style/ File no.	20798 / E188165 & 20861 / E146835			
Flame retardant test	ULVW-1			
Rating	80°C / 60V & 105°C / 60V			
Dielectric with standing voltage	DC500V for 1 min.			
Insulation resistance between conductors	$>100M\Omega$ (DC500V at 20°C)			
Humidity test	40°C, RH 95%, 96hours			
Flexibility test	Normal : More than 10,000 cycle			
	Abnormal : More than 10,000,000 cycle			
Ageing test	85°C, 96 hours			

## SPECIFICATION GUIDE

ITEM	SELECTION				CONSIDERATION
No. of conductors	4 ~ 50				No. of circuits required
Conductor pitch	0.5mm	1.0mm	1.25mm	2.54mm	Space, PCB layout and FFC Connector pitch
Conductor size	0.035× 0.3(mm)	0.1×0.7(mm) 0.035×0.7(mm)	0.1×0.8(mm) 0.05×0.8(mm)	0.1×0.8(mm) 0.1×1.27(mm)	Conductor resistance and Flexing life
Termination	Solder-type				Solder to PCB
	Insertion-type				Insert to FFC connector
Configuration	Type A,B,C,D				Insert to FFC connector
					Orientation of FFC connector contact
	Type E				One end to be soldered to PCB and the other end to be inserted to FFC connector
	Type F				Flexing position near to supporting tape edge
	Type G				Both ends to be soldered to PCB
Overall length, L	25~1,000mm				Dimensional requirement
Strip length, S1,S2	3,4,5,6 mm (Insertion-type)				FFC connector contact distance
	3,4,5,6 mm (Solder-type)				PCB solder pad size
Reinforcing tape length, B1,B2	5,6,8,10,15,20 mm (Insertion-type)				Connector dimension, operator insertion grip length, flexing position
Folding	Up to user's design				Folding to meet layout requirement