Sumi-Card (S/C)

"Sumi-Card®" is the most suitable flat cable for a downsized wiring system. Sumitomo Electric has engineered this specially designed flat conductor cable system. The unique design of the Sumi-Card Cable System is utilizes a highly flexible flat cable whose conductors are used as the male contact and enables to joint to a connector for FFC.

APPLICATION

The Sumi-Card cable is used for a internal wiring of electronic equipment.

- audio, video, DVD,CD-ROM, MO, personal computer, printer, scanner

DESCRIPTION

- Efficient downsized wiring system
- Compact : Insulation thickness is thin
- Flexibility
- Easy to connect
- Rating : rating temperature 80°C, rating voltage 30V ～rating temperature 105°C, rating Voltage 300V
- Flame retardant : the vertical flame retardant test based on UL VW-1

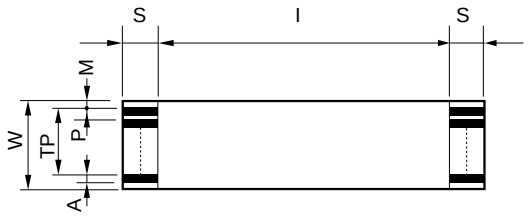
CONSTRUCTION & TYPICAL PROPERTIES

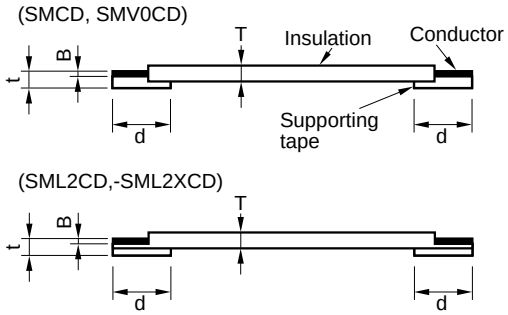
Item		**Construction**			
Conductor		Tinned copper			
Type		Standard	Super Flexible	Soft	Irrax
Name		SMCD	SML2CD	SMV0CD	SML2XCD
Insulation	Insulation	Polyester	Polyester	Soft Plastic	Polyester
	Adhesive	FRPVC	Polyester	–	Irradiated Polyolefin
	Color	White	White	Transparent	White
Supporting tape	Material	Polyester	Polyester	Polyester	Polyester
	Color	Blue	Blue	Red	Blue

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Nominal dimension





Unit:mm

Item		Specification						
Number of conductor	(n)	Min.3						
Pitch	(P)	2.54		1.25	1.0		0.8	0.5
Conductor width	(A)	1.27	0.8	0.8	0.7	0.6	0.5	0.3
Margin width	(M)	1.91	2.14	0.85	0.65	0.70	0.55	0.35
Total pitch	(TP)	P x (n-1)						
Width	(W)	P x (n+1)						
Insulation length	(I)	Min.20						
Thickness	(t)	0.3						
Strip length	(S)	4, 5, 6						
Supporting tape length	(d)	6, 8, 10, 15, 20						

UL Style No. and products

Name	UL Style No. (rating temperature, rating voltage)	Thickness of conductor (B) (mm)	Thickness (T) (mm)	Pitch (P) (mm)				
				2.54	1.25	1.0	0.8	0.5
SMCD	2896 (80°C,30V)	0.1	0.30	○	○	○	△	●
		0.05	0.25	○	○	○	○	●
	2896 Thin type (80°C,30V)	0.05	0.17	○	○	○	○	●
		0.035	0.15	●	○	○	○	●
	20624 (80°C,60V)	0.1	0.30	○	○	○	△	●
		0.05	0.25	○	○	○	○	●
SML2CD	2896 (80°C,30V)	0.05	0.20	○	○	○	○	○
		0.035	0.18	●	○	○	○	○
	2896 Thin type (80°C,30V)	0.035	0.11	●	○	○	○	○
		0.025	0.09	●	○	○	△	△
	20624 (80°C,60V)	0.05	0.20	●	○	○	○	○
		0.035	0.18	●	○	○	○	○
SMV0CD	20624 (80°C,60V)	0.05	0.35	○	○	○	●	●
SML2XCD	20783 (105°C,300V)	0.05	0.20	○	○	○	●	●
		0.035	0.19	●	○	○	●	●

○:Sumitomo standard
△:Avairable
●:Cannot product

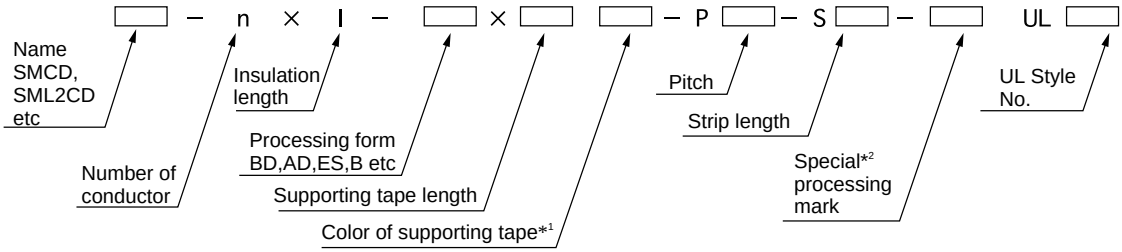
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Typical Properties

Nomenclature		SMCD	SML2CD	SMV0CD	SML2XCD
Nominal dimension of conductor		0.1 x 0.8	0.035 x 0.8	0.05 x 0.8	0.035 x 0.8
Pitch (mm)		1.25	1.25	1.25	1.25
Flame test		UL VW-1	UL VW-1	UL VW-1	UL VW-1
Conductor Resistance (Ω/km)		Max.260	Max.750	Max.520	Max.750
Insulation Resistance (MΩ-m)		Min.1000	Min.1000	Min.1000	Min.1000
Dielectric Strength (between adjacent conductors) (AC.V/min)		500	500	500	2500
Flexing Test	Sliding Test	15mmR Min.100000	15mmR Min.10000000	15mmR Min.100000	5mmR Min.500000
	Folding Test	Min.20	Min.100	Min.50	Min.50
Abrasion Test 60cycles/min, Ø0.5, 600g		Min.10,000	Min.10,000	Min.1,000	Min.10,000

Nomenclature

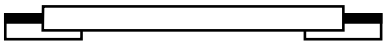


*1 Blue ; BL, Red ; RE
*2 ① Process K : special processing
② Insulation M : UL marking
B : Black color
F : Thin type
③ Conductor T : Conductor width 0.8mm
T(0.6) : Conductor width 0.6mm
N : Thickness of conductor 0.05mm
N(35) : Thickness of conductor 0.035mm
N(25) : Thickness of conductor 0.025mm

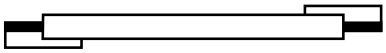
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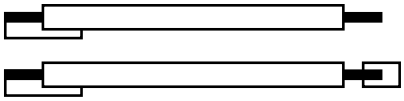
BD type
- supporting tape of both end are on same side



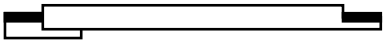
AD type
- supporting tape of both end are on opposite side



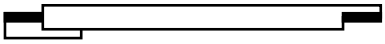
ES type
- supporting tape on one end and other end is soldering type
  (including semi-strip type)



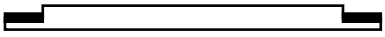
BS type
- supporting tape on one end and other end of same one side is stripped



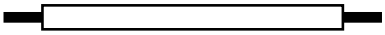
AS type
- supporting tape on one end and other end of opposite one side is stripped



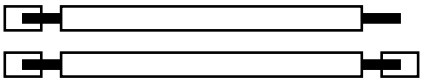
A type
- both end of same one side are stripped (on supporting tape)



B type
- both end are stripped
  (no supporting tape)



C type
- one or both end are semi-striooed



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