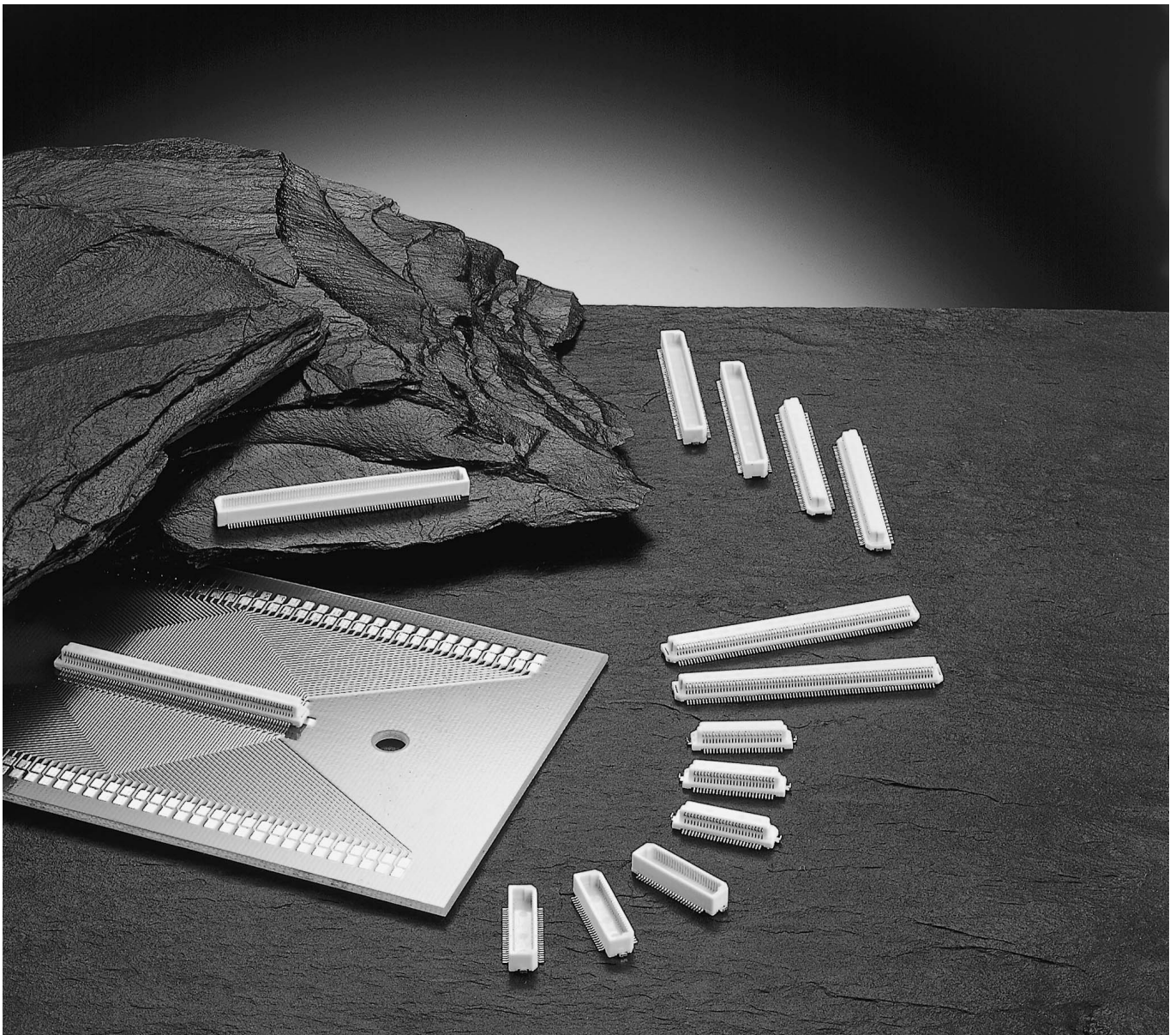
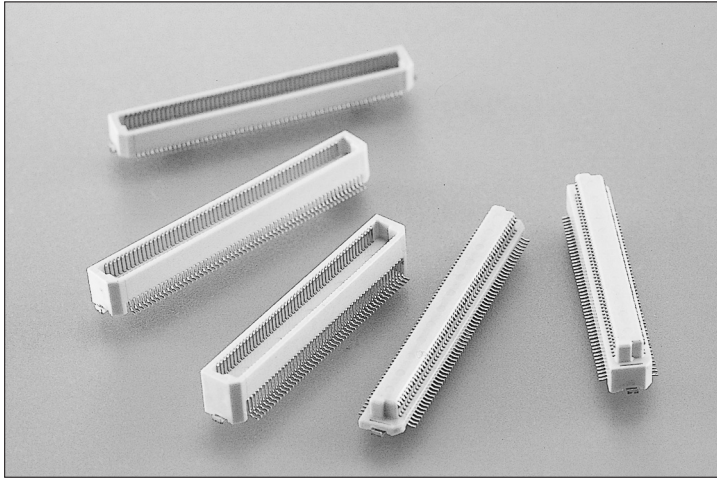


**FINE PITCH CONNECTION
MULTI-PIN SMT
0.5mm PITCH 2 PIECE CONNECTOR**

DG01 SERIES





FEATURES

- Contacts are formed from the rolled surface of material stock
- Contacts are protected from damage
- High temperature insulator is IR reflow compatible
- SMT Retention clips and Positioning posts are optional
- Can be automatic or manually placed
- SMT solder joints are easy to inspect and repair
- Mated heights of 4, 5, 6, 7 and 8mm
- RoHS compliance

ORDER CODE

DG01 - [] - [] - [] - **0**

- Series name
- Connector type
 MS : Plug (Male)
 FS : Receptacle (Female)
- Number of contacts
 040 : 40 pin 050 : 50 pin
 060 : 60 pin 080 : 80 pin
 100 : 100 pin 120 : 120 pin
 140 : 140 pin
- Stacked height
 Plug
 2 : For mating height of 4, 5, 6mm
 4 : For mating height of 6, 7, 8mm
 Receptacle
 2 : For mating height of 4, 6mm
 3 : For mating height of 5, 7mm
 4 : For mating height of 6, 8mm
- Positioning posts
 0 : Without posts
 1 : With posts
- SMT Retention clips
 0 : Without clips
 1 : With clips
 (Embossed tape/Tape & Reel only)
- Packaging style
 0 : Embossed tape (Tape&Reel)
- Plating of contact area
 Omit : Au 0.05 μ m (Standard)

SPECIFICATIONS

- Insulator : Plug ; Glass-filled LCP (UL 94V-0), White
 Receptacle ; Glass-filled Nylon 46 (UL 94V-0), White
- Contact material : Copper alloy
- Contact plating : 0.05 μ m min. Gold over Nickel
- Current rating : 0.3A per contact
- Contact resistance : 50m Ω max.
- Dielectric withstanding voltage : 200V AC for 1 minute
- Insulation resistance : 1,000M Ω min. at 250 V DC
- Operating temperature : -55 $^{\circ}$ C to +85 $^{\circ}$ C

* Please contact your local sales office for orders less than 500 pcs. or regarding automatic placement.

STACKED MATING COMBINA

4mm Height	5mm Height	6mm Height	6mm Height	7mm Height	8mm Height
DG01FS-□□□-2□□□	DG01FS-□□□-3□□□	DG01FS-□□□-4□□□	DG01FS-□□□-2□□□	DG01FS-□□□-3□□□	DG01FS-□□□-4□□□
DG01MS-□□□-2□□□	DG01MS-□□□-2□□□	DG01MS-□□□-2□□□	DG01MS-□□□-4□□□	DG01MS-□□□-4□□□	DG01MS-□□□-4□□□

Receptacle

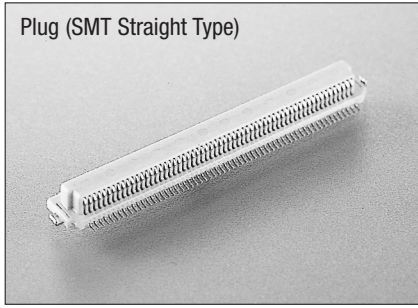
- DG01FS-□□□-2□□□
- DG01FS-□□□-3□□□
- DG01FS-□□□-4□□□

Plug

- DG01MS-□□□-2□□□
- DG01MS-□□□-4□□□

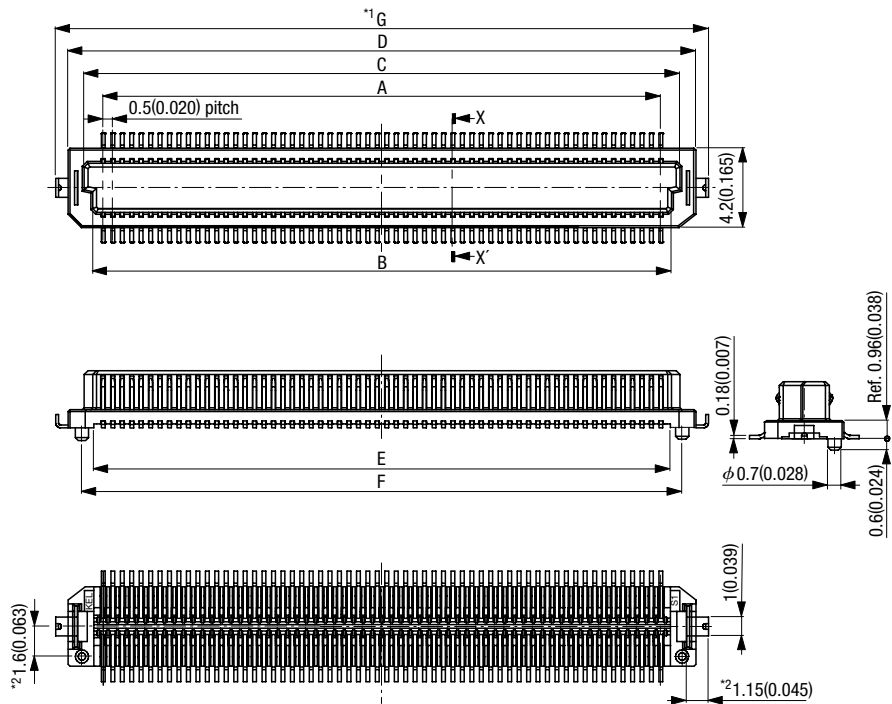
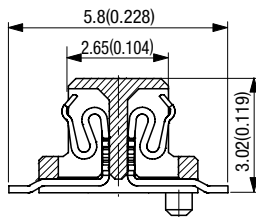
DG01MS-□□□-2□□0 (Plug, For 4, 5 and 6 mm stacked height)

Plug (SMT Straight Type)

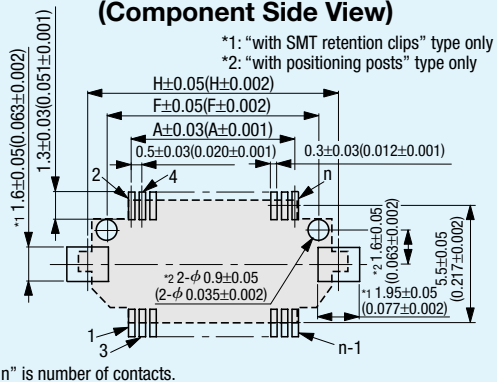


Unit:mm(inch)

X-X' Cross Section



Printed Circuit Board Layout
(Component Side View)



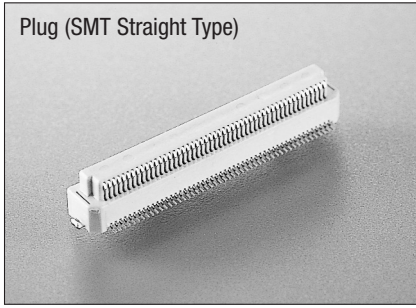
Product Table / Dimensions

No. of contacts	Part Number	A	B	C	D	E	F	G	H	Number of packaging
40	DG01MS-040-2□□0	9.50 (0.374)	10.62 (0.418)	11.52 (0.454)	13.22 (0.520)	10.50 (0.413)	11.76 (0.463)	14.54 (0.572)	13.59 (0.535)	500
50	DG01MS-050-2□□0	12.00 (0.472)	13.12 (0.517)	14.02 (0.552)	15.72 (0.619)	13.00 (0.512)	14.26 (0.561)	17.04 (0.671)	16.09 (0.633)	500
60	DG01MS-060-2□□0	14.50 (0.571)	15.62 (0.615)	16.52 (0.650)	18.22 (0.717)	15.50 (0.610)	16.76 (0.660)	19.54 (0.769)	18.59 (0.732)	500
80	DG01MS-080-2□□0	19.50 (0.768)	20.62 (0.812)	21.52 (0.847)	23.22 (0.914)	20.50 (0.807)	21.76 (0.857)	24.54 (0.966)	23.59 (0.929)	500
100	DG01MS-100-2□□0	24.50 (0.965)	25.62 (1.009)	26.52 (1.044)	28.22 (1.111)	25.50 (1.004)	26.76 (1.054)	29.54 (1.163)	28.59 (1.126)	500
120	DG01MS-120-2□□0	29.50 (1.161)	30.62 (1.206)	31.52 (1.241)	33.22 (1.308)	30.50 (1.201)	31.76 (1.250)	34.54 (1.360)	33.59 (1.322)	500
140	DG01MS-140-2□□0	34.50 (1.358)	35.62 (1.402)	36.52 (1.438)	38.22 (1.505)	35.50 (1.398)	36.76 (1.447)	39.54 (1.557)	38.59 (1.519)	500

Packaging style
Embossed tape

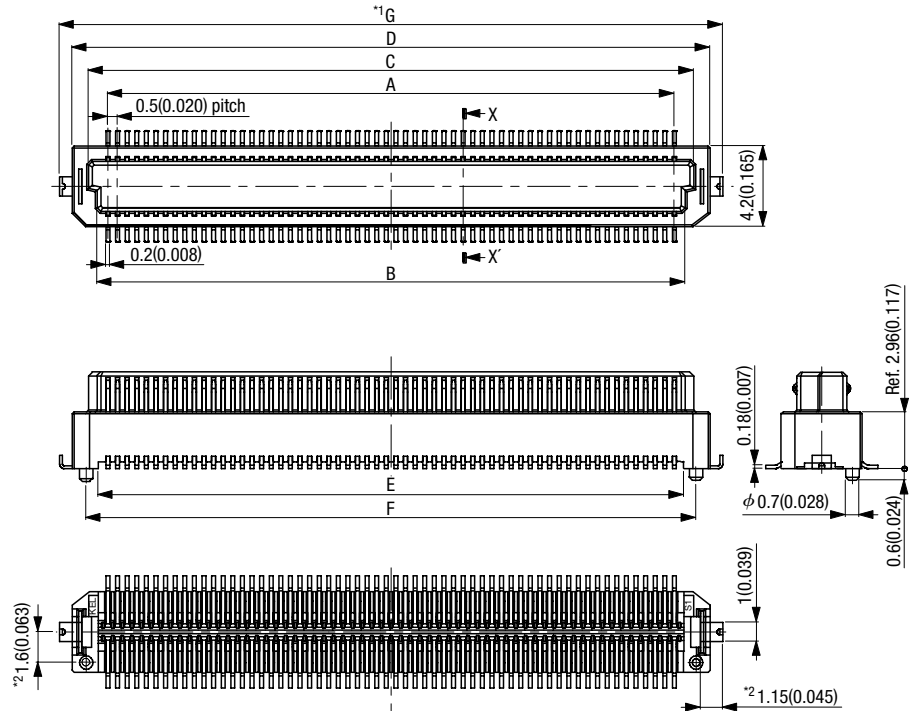
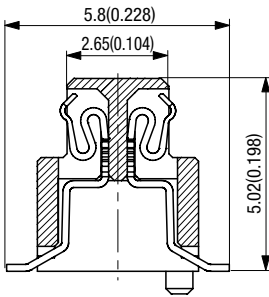
DG01MS-□□□-4□□0 (Plug, For 6, 7 and 8 mm stacked height)

Plug (SMT Straight Type)

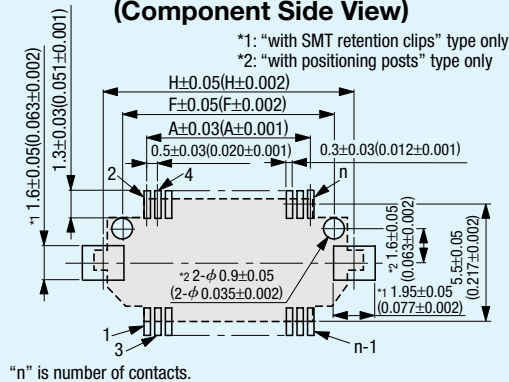


Unit:mm(inch)

X-X' Cross Section



Printed Circuit Board Layout (Component Side View)



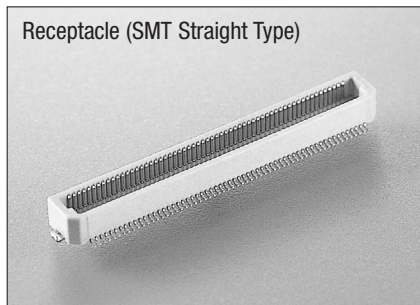
■ Product Table / Dimensions

No. of contacts	Part Number	A	B	C	D	E	F	G	H	Number of packaging
40	DG01MS-040-4□□0	9.50 (0.374)	10.62 (0.418)	11.52 (0.454)	13.22 (0.520)	10.50 (0.413)	11.76 (0.463)	14.54 (0.572)	13.59 (0.535)	500
50	DG01MS-050-4□□0	12.00 (0.472)	13.12 (0.517)	14.02 (0.552)	15.72 (0.619)	13.00 (0.512)	14.26 (0.561)	17.04 (0.671)	16.09 (0.633)	500
60	DG01MS-060-4□□0	14.50 (0.571)	15.62 (0.615)	16.52 (0.650)	18.22 (0.717)	15.50 (0.610)	16.76 (0.660)	19.54 (0.769)	18.59 (0.732)	500
80	DG01MS-080-4□□0	19.50 (0.768)	20.62 (0.812)	21.52 (0.847)	23.22 (0.914)	20.50 (0.807)	21.76 (0.857)	24.54 (0.966)	23.59 (0.929)	500
100	DG01MS-100-4□□0	24.50 (0.965)	25.62 (1.009)	26.52 (1.044)	28.22 (1.111)	25.50 (1.004)	26.76 (1.054)	29.54 (1.163)	28.59 (1.126)	500
120	DG01MS-120-4□□0	29.50 (1.161)	30.62 (1.206)	31.52 (1.241)	33.22 (1.308)	30.50 (1.201)	31.76 (1.250)	34.54 (1.360)	33.59 (1.322)	500
140	DG01MS-140-4□□0	34.50 (1.358)	35.62 (1.402)	36.52 (1.438)	38.22 (1.505)	35.50 (1.398)	36.76 (1.447)	39.54 (1.557)	38.59 (1.519)	500

Packaging style
 Embossed tape

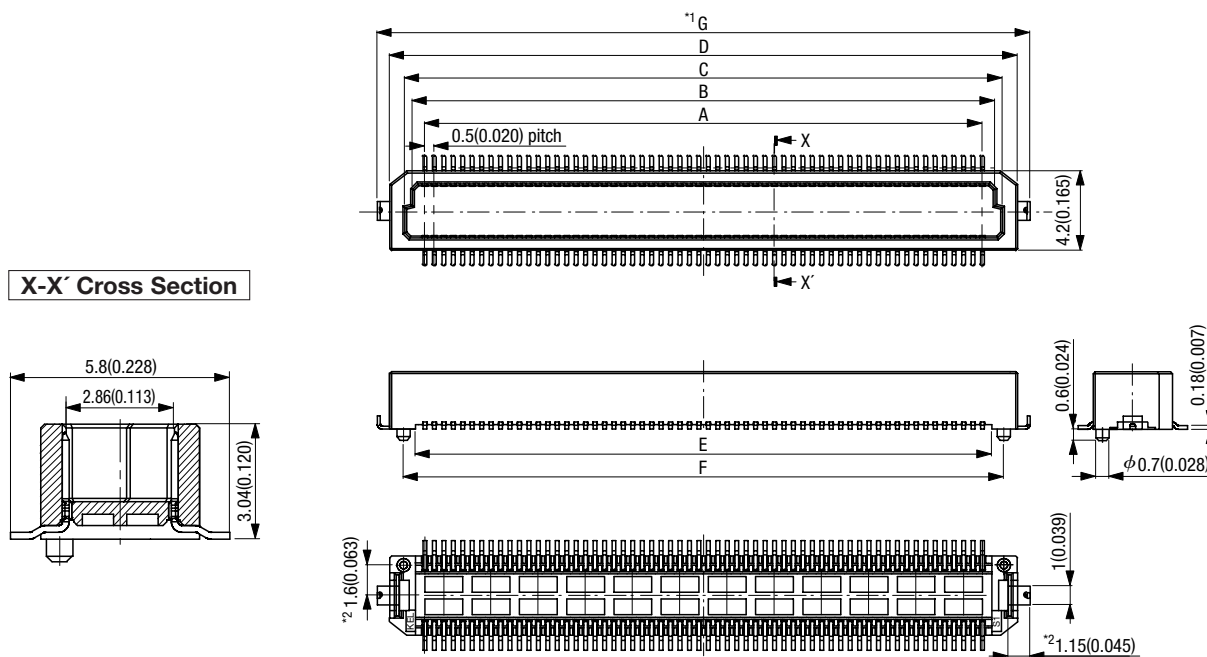
DG01FS-□□□-2□□0 (Receptacle, For 4 and 6 mm stacked height)

Receptacle (SMT Straight Type)

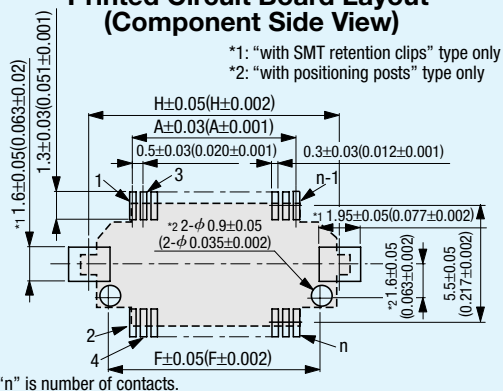


Unit:mm(inch)

X-X' Cross Section



Printed Circuit Board Layout
(Component Side View)



*1: "with SMT retention clips" type only
*2: "with positioning posts" type only

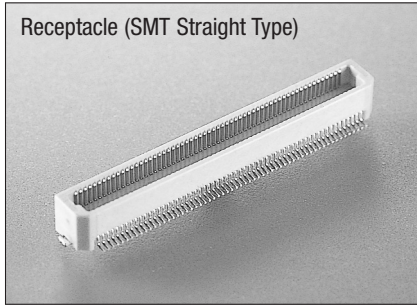
Product Table / Dimensions

No. of contacts	Part Number	A	B	C	D	E	F	G	H	Number of packaging
40	DG01FS-040-2□□0	9.50 (0.374)	10.82 (0.426)	11.62 (0.457)	13.22 (0.520)	10.50 (0.413)	11.76 (0.463)	14.54 (0.572)	13.59 (0.535)	500
50	DG01FS-050-2□□0	12.00 (0.472)	13.32 (0.524)	14.12 (0.556)	15.72 (0.619)	13.00 (0.512)	14.26 (0.561)	17.04 (0.671)	16.09 (0.633)	500
60	DG01FS-060-2□□0	14.50 (0.571)	15.82 (0.623)	16.62 (0.654)	18.22 (0.717)	15.50 (0.610)	16.76 (0.660)	19.54 (0.769)	18.59 (0.732)	500
80	DG01FS-080-2□□0	19.50 (0.768)	20.82 (0.820)	21.62 (0.851)	23.22 (0.914)	20.50 (0.807)	21.76 (0.857)	24.54 (0.966)	23.59 (0.929)	500
100	DG01FS-100-2□□0	24.50 (0.965)	25.82 (1.017)	26.62 (1.048)	28.22 (1.111)	25.50 (1.004)	26.76 (1.054)	29.54 (1.163)	28.59 (1.126)	500
120	DG01FS-120-2□□0	29.50 (1.161)	30.82 (1.213)	31.62 (1.245)	33.22 (1.308)	30.50 (1.201)	31.76 (1.250)	34.54 (1.360)	33.59 (1.322)	500
140	DG01FS-140-2□□0	34.50 (1.358)	35.82 (1.410)	36.62 (1.442)	38.22 (1.505)	35.50 (1.398)	36.76 (1.447)	39.54 (1.557)	38.59 (1.519)	500

Packaging style
Embossed tape

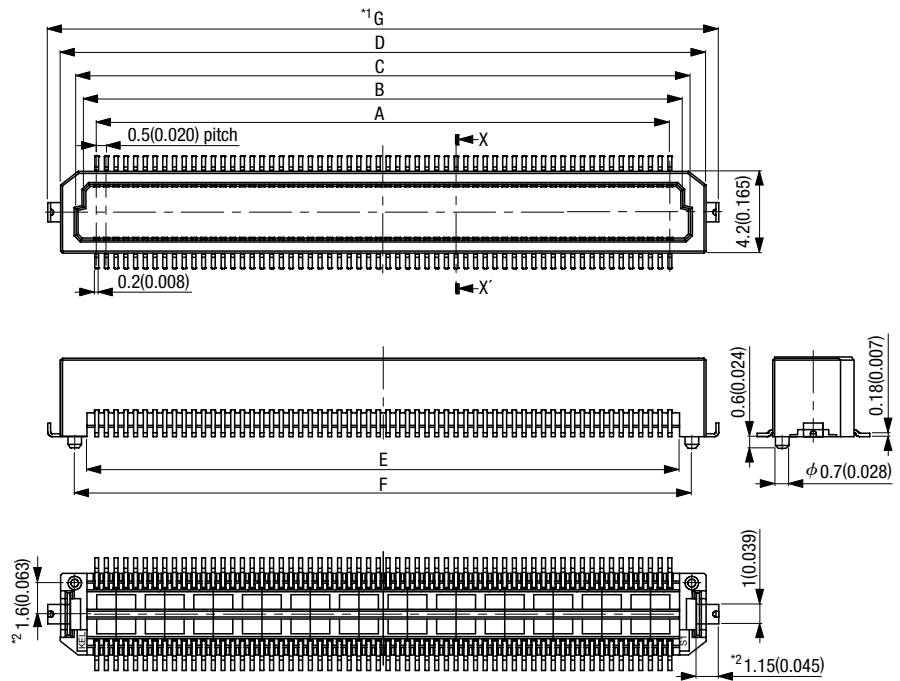
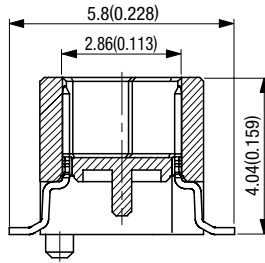
DG01FS-□□□-3□□0 (Receptacle, For 5 and 7 mm stacked height)

Receptacle (SMT Straight Type)

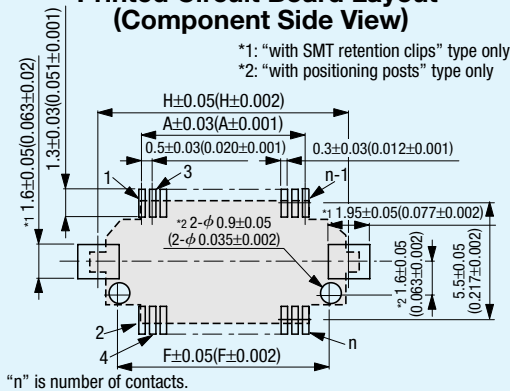


Unit:mm(inch)

X-X' Cross Section



Printed Circuit Board Layout (Component Side View)



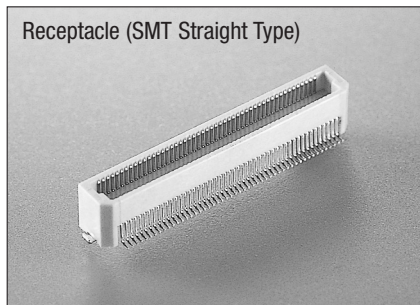
■ Product Table / Dimensions

No. of contacts	Part Number	A	B	C	D	E	F	G	H	Number of packaging
40	DG01FS-040-3□□0	9.50 (0.374)	10.82 (0.426)	11.62 (0.457)	13.22 (0.520)	10.50 (0.413)	11.76 (0.463)	14.54 (0.572)	13.59 (0.535)	500
50	DG01FS-050-3□□0	12.00 (0.472)	13.32 (0.524)	14.12 (0.556)	15.72 (0.619)	13.00 (0.512)	14.26 (0.561)	17.04 (0.671)	16.09 (0.633)	500
60	DG01FS-060-3□□0	14.50 (0.571)	15.82 (0.623)	16.62 (0.654)	18.22 (0.717)	15.50 (0.610)	16.76 (0.660)	19.54 (0.769)	18.59 (0.732)	500
80	DG01FS-080-3□□0	19.50 (0.768)	20.82 (0.820)	21.62 (0.851)	23.22 (0.914)	20.50 (0.807)	21.76 (0.857)	24.54 (0.966)	23.59 (0.929)	500
100	DG01FS-100-3□□0	24.50 (0.965)	25.82 (1.017)	26.62 (1.048)	28.22 (1.111)	25.50 (1.004)	26.76 (1.054)	29.54 (1.163)	28.59 (1.126)	500
120	DG01FS-120-3□□0	29.50 (1.161)	30.82 (1.213)	31.62 (1.245)	33.22 (1.308)	30.50 (1.201)	31.76 (1.250)	34.54 (1.360)	33.59 (1.322)	500
140	DG01FS-140-3□□0	34.50 (1.358)	35.82 (1.410)	36.62 (1.442)	38.22 (1.505)	35.50 (1.398)	36.76 (1.447)	39.54 (1.557)	38.59 (1.519)	500

Packaging style
 Embossed tape

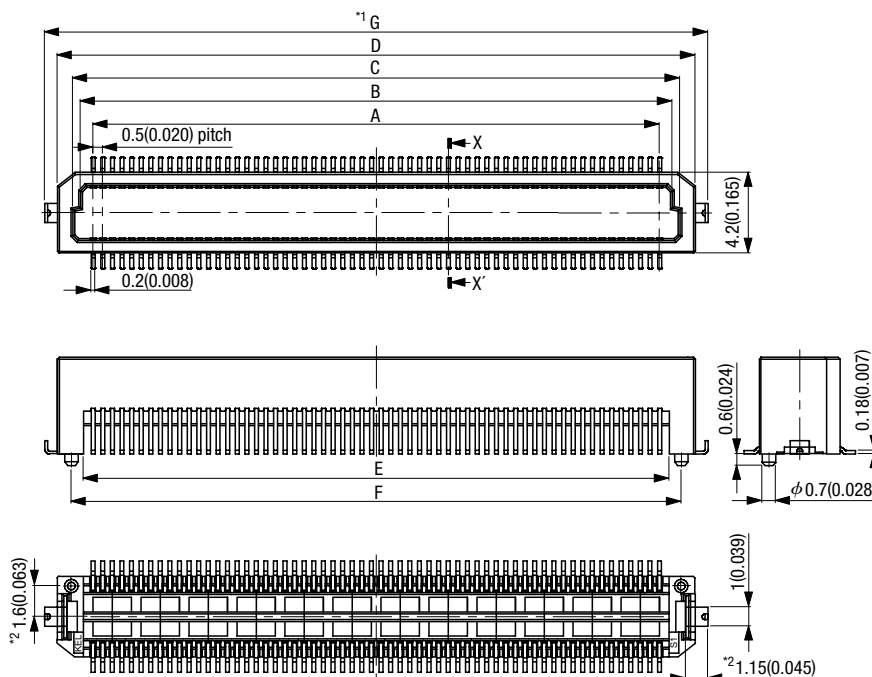
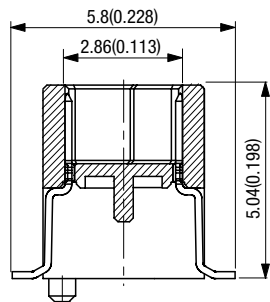
DG01FS-□□□-4□□0 (Receptacle, For 6 and 8 mm stacked height)

Receptacle (SMT Straight Type)

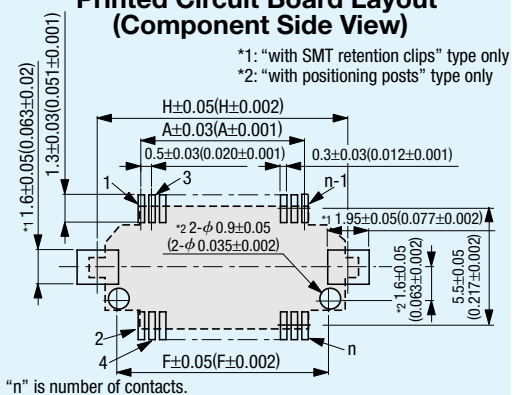


Unit:mm(inch)

X-X' Cross Section



Printed Circuit Board Layout
(Component Side View)



Product Table / Dimensions

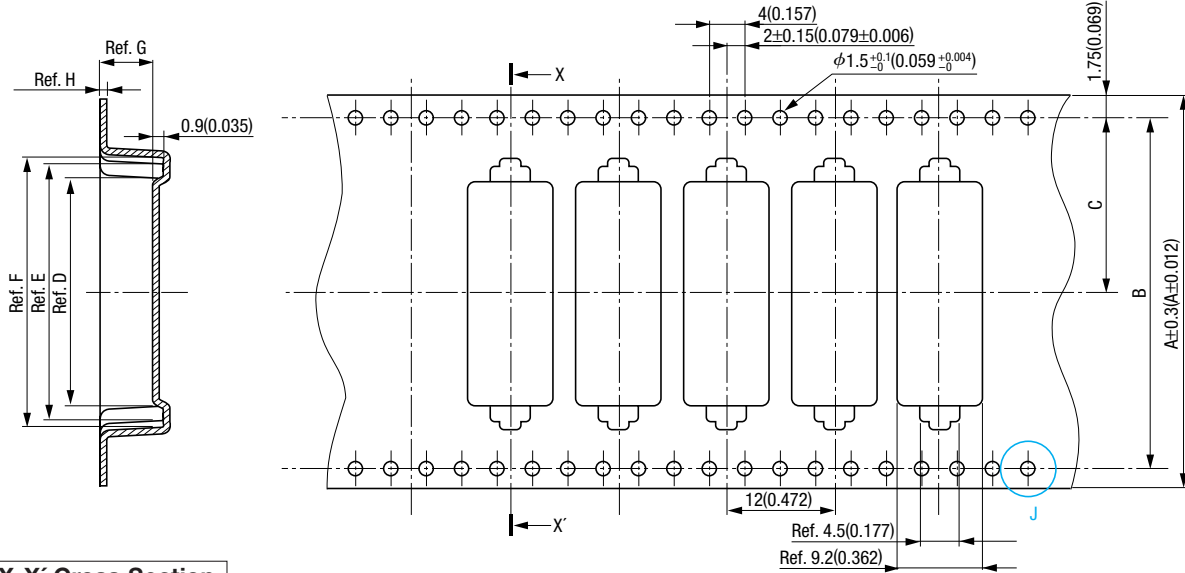
No. of contacts	Part Number	A	B	C	D	E	F	G	H	Number of packaging
40	DG01FS-040-4□□0	9.50 (0.374)	10.82 (0.426)	11.62 (0.457)	13.22 (0.520)	10.50 (0.413)	11.76 (0.463)	14.54 (0.572)	13.59 (0.535)	500
50	DG01FS-050-4□□0	12.00 (0.472)	13.32 (0.524)	14.12 (0.556)	15.72 (0.619)	13.00 (0.512)	14.26 (0.561)	17.04 (0.671)	16.09 (0.633)	500
60	DG01FS-060-4□□0	14.50 (0.571)	15.82 (0.623)	16.62 (0.654)	18.22 (0.717)	15.50 (0.610)	16.76 (0.660)	19.54 (0.769)	18.59 (0.732)	500
80	DG01FS-080-4□□0	19.50 (0.768)	20.82 (0.820)	21.62 (0.851)	23.22 (0.914)	20.50 (0.807)	21.76 (0.857)	24.54 (0.966)	23.59 (0.929)	500
100	DG01FS-100-4□□0	24.50 (0.965)	25.82 (1.017)	26.62 (1.048)	28.22 (1.111)	25.50 (1.004)	26.76 (1.054)	29.54 (1.163)	28.59 (1.126)	500
120	DG01FS-120-4□□0	29.50 (1.161)	30.82 (1.213)	31.62 (1.245)	33.22 (1.308)	30.50 (1.201)	31.76 (1.250)	34.54 (1.360)	33.59 (1.322)	500
140	DG01FS-140-4□□0	34.50 (1.358)	35.82 (1.410)	36.62 (1.442)	38.22 (1.505)	35.50 (1.398)	36.76 (1.447)	39.54 (1.557)	38.59 (1.519)	500

Packaging style
Embossed tape

Embossed Tape Packaging Specification

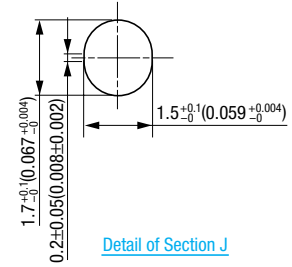
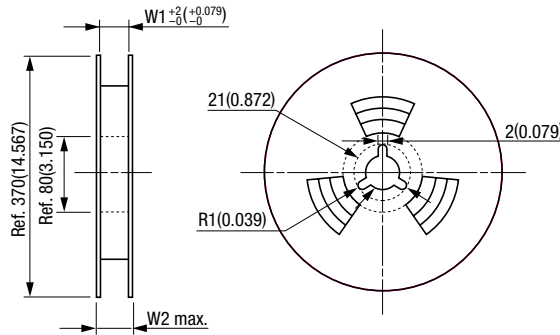
Unit:mm(inch)

Carrier tape



X-X' Cross Section

Reel



Detail of Section J

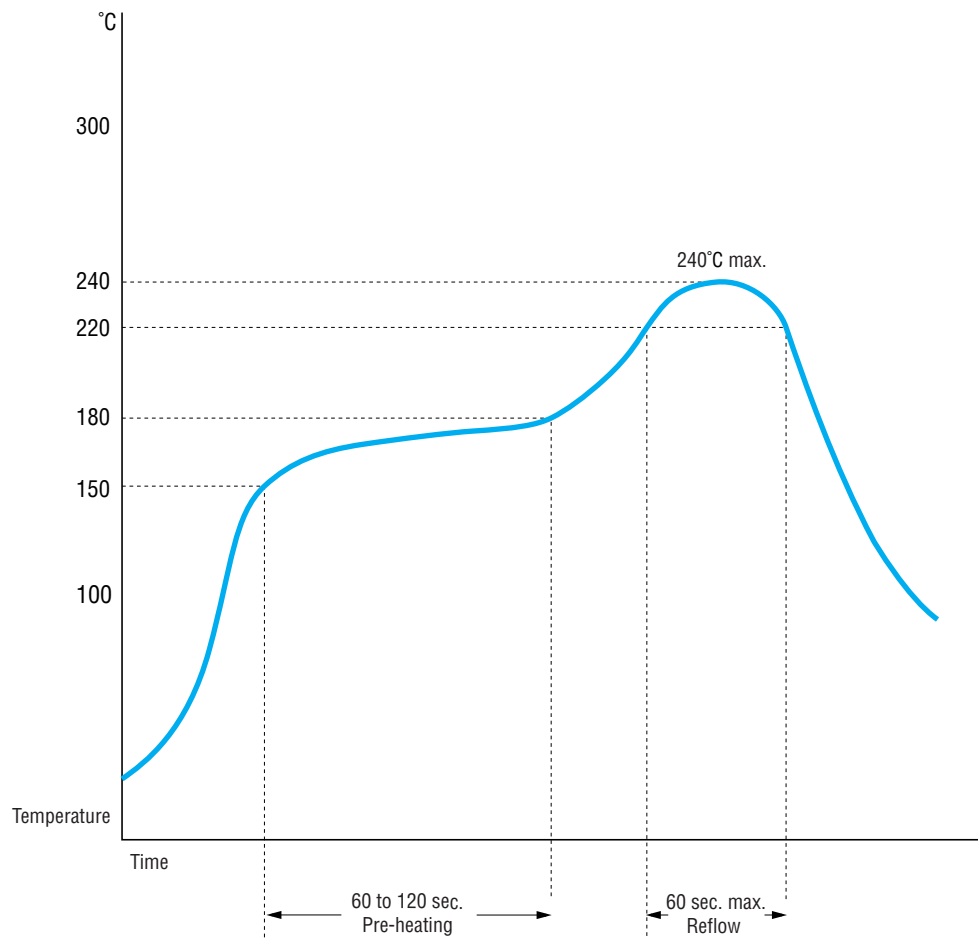
Product Table / Dimensions

No. of contacts	Part Number	A	B	C	D	E	F	W1	W2
40	DG01□□-040-□□□□	32.00 (1.260)	28.40 (1.118)	14.20 (0.559)	10.28 (0.405)	13.52 (0.532)	15.14 (0.596)	32.40 (1.276)	38.40 (1.512)
50	DG01□□-050-□□□□	32.00 (1.260)	28.40 (1.118)	14.20 (0.559)	12.78 (0.503)	16.02 (0.631)	17.64 (0.694)	32.40 (1.276)	38.40 (1.512)
60	DG01□□-060-□□□□	32.00 (1.260)	28.40 (1.118)	14.20 (0.559)	15.28 (0.602)	18.52 (0.729)	20.14 (0.793)	32.40 (1.276)	38.40 (1.512)
80	DG01□□-080-□□□□	44.00 (1.732)	40.40 (1.591)	20.20 (0.795)	20.28 (0.798)	23.52 (0.926)	25.14 (0.990)	44.40 (1.748)	50.40 (1.984)
100	DG01□□-100-□□□□	44.00 (1.732)	40.40 (1.591)	20.20 (0.795)	25.28 (0.995)	28.52 (1.123)	30.14 (1.187)	44.40 (1.748)	50.40 (1.984)
120	DG01□□-120-□□□□	56.00 (2.205)	52.40 (2.063)	26.20 (1.031)	30.28 (1.192)	33.52 (1.320)	35.14 (1.383)	56.40 (2.220)	62.40 (2.457)
140	DG01□□-140-□□□□	56.00 (2.205)	52.40 (2.063)	26.20 (1.031)	35.28 (1.389)	38.52 (1.517)	40.14 (1.580)	56.40 (2.220)	62.40 (2.457)

Part Number	G	H
DG01MS-160-2□□□	3.10 (0.122)	0.5 (0.020)
DG01MS-160-4□□□	5.10 (0.201)	0.5 (0.020)
DG01MS-□□□-2□□□	3.82 (0.150)	0.4 (0.016)
DG01MS-□□□-4□□□	4.82 (0.190)	0.4 (0.016)
DG01FS-160-2□□□	3.10 (0.122)	0.5 (0.020)
DG01FS-160-3□□□	4.10 (0.161)	0.5 (0.020)
DG01FS-160-4□□□	5.10 (0.201)	0.5 (0.020)
DG01FS-□□□-2□□□	3.82 (0.150)	0.4 (0.016)
DG01FS-□□□-3□□□	4.82 (0.190)	0.4 (0.016)
DG01FS-□□□-4□□□	5.82 (0.229)	0.4 (0.016)

Recommended Soldering Conditions (SMT type)

- Soldering Iron : 300°C or lower, 3 sec. max.
- Solder flux should be applied to PCB and not to contact tails.
- Recommended stencil thickness for solder paste is 0.15mm (0.006")
- Recommended temperature profile for IR reflow as the follows:



Note: Flux should be applied to PCB not connector tails.