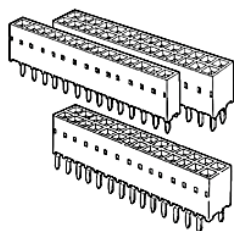


66953-020LF - BERGCON
PV™, DUBOX™ : 40 Position
PCB Mounted Receptacle,
Through Mount, Top Entry,
Double Row



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Mating Half

➤ 77313-101-40LF

➤ 95278-101-40LF

Specifications

General

Hold Down Style	No Locating Pegs
Number of contacts (per row)	20
Number of contacts (Total)	40
Number of rows	2
Orientation	Vertical
Packaging	Tube
Mating half	Mates with 0.64 mm (0.025 in.) Square pins.
Series Number	66953

Dimensional

Thickness (Board)	1.6 mm (0.062 in.) or 2.36 mm (0.093 in.)
Footprint (Board)	2.54 mm x 2.54 mm (0.1 in. x 0.1 in.)

Electrical

Current rating	3A max. per Contact/2A max. per Contact for Full Load
Resistance (Contact)	10 milli ohms Initial, 15 milli ohms After test
Resistance (Insulation)	5000 M-ohms
Voltage rating	1250V rms

Mechanical

Insertion force	1.26N (128 gf) max. per Contact
Withdrawal Force	0.4N (40 gf) min. per Contact

Mounting

Solder process	Wave
----------------	------

Physical

Color (Housing)	Black
Material (Contact)	Phosphor Bronze
Material (Housing)	High Temperature Thermoplastic

Plating (Contact area)	0.76 µm (30 µin.) Gold
Plating (Tail)	2.54 µm (100 µin.) Tin
Underplating (Contact)	1.27 µm (50 µin.) Nickel
Flammability rating	UL 94 V-0
Temperature (Range)	-65 °C to +125 °C
Approvals / Certifications	
UL File Number	E66906
CSA File Number	LR46923
Approvals / Certifications	UL and CSA Approved



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66953-XXXLF

LEAD FREE OPTION (NOTE 5,6)

NUMBER OF POSITIONS

MARKING CODE (SEE TABLE)

BASE NUMBER

 $\square .034$
0.86
TYP $.070$ REF
1.78
2 PLACES $.100 \pm .004$
 2.54 ± 0.10
NON-ACCUMULATIVE

DIM A

 $\pm .004$
 ± 0.10 $.325 \pm .010$
 8.25 ± 0.25

-Z-

 $.013$ REF
0.32 $.138$
3.51 $.029$
0.74
TYP REF $.100$
2.54
TYP $\perp Z .005 / .13$
TYP $.047$ REF
1.19
2 PLACES

DIM B MAX

 $.010$ REF
0.25
2 PLACES
 $.100$
2.54
AT HOUSING

mat'l. code				surface	tolerance	projection	product family
				ISO 1302 ☒	ISO 406 ISO 1101		VCC
ltr	ecn no	dr	date	tolerances unless otherwise specified		 INCH/MM scale 1:1 	title
H	V50931	SAR	8/8/95	angles	linear		VERT. CARD CONNECTOR
J	V50963	LSS	8/16/95				D/R .100/2.54 CC
K	V70788	LSS	6/12/97	0°±2'			
L	V80354	EPK	3/6/98	dr	M. FETROW	6/26/89	dwg no
M	V94468	MDF	1/11/00	enr	M. HAHN	6/26/89	sheet 1 of 3
N	M05-0124	MHT	6/06/05	chr	M. HAHN	6/26/89	size
P	M07-0143	ERE	03/03/07	appd	M. HAHN	6/26/89	A3
sheet	revision	P	P	P			type
index	sheet	1	2	3			Product Customer Drawing

form: A3

PRODUCT NO.	MARKING CODE	
SEE TABLE	66953-0XX	STANDARD MARKING PER NOTE 3
	66953-8XX	SPECIAL MIL MARKING PER NOTE 5

OBS

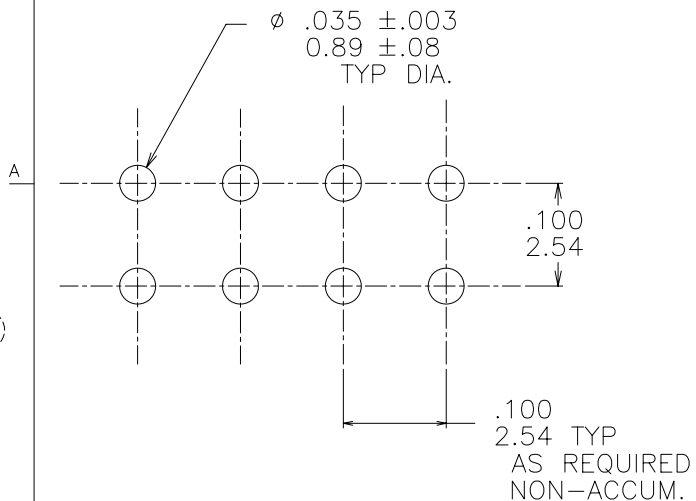


FIG. 1
SCALE 6:1

NOTES.

- HOUSING MATERIAL: FILLED POLYESTER,
FLAME RETARDANT PER UL 94V-0.
COLOR: BLACK.
- TERMINAL MATERIAL:
BODY: BRASS
SPRING: BeCu. HEAT TREATED
BODY PLATING: 30u"/.76 Au OVER 50u"/1.27u Ni IN CONTACT AREA.
100u"/2.54 Sn (NOTE 8) OVER 50u"/1/27u Ni ON SOLDER TAIL.
SPRING PLATING: GOLD FLASH
- MARK FCI PART NUMBER AND DATE CODE LEGIBLE ON TUBE LABEL.
- APPLICATION INFORMATION.
A. RECOMMENDED MOUNTING HOLE PATTERN IS SHOWN IN FIG. 1
B. ALL MATING PINS TO BE .025/.64 SQUARE ON TRUE CENTER OF GIVEN
TERMINAL SPACINGS, WITHIN .015/.38 DIAMETER.
C. SUGGESTED MATING PIN LENGTH, .210 $\pm$.020/5.33 $\pm$.51.
- ADD "LF" SUFFIX AT THE END OF PART NUMBER FOR LEAD FREE OPTION.
- THIS PRODUCT MEETS EUROPEAN UNION DIRECTIVES AND OTHER
COUNTRY REGULATION AS DESCRIBED IN GS-22-008.
- THE HOUSING WILL WITHSTAND EXPOSURE TO 260°C PEAK TEMPERATURE
FOR 15 SECONDS IN A WAVE SOLDER APPLICATION WITH A 1.5mm
MINIMUM THICK CIRCUIT BOARD. SEE APPLICATION NOTES/PROCEDURES
IF THEY ARE AVAILABLE.
- "THIS PRODUCT HAS 100% TIN PLATING IN THE INTERFACE AND
HAS NOT BEEN TESTED FOR WHISKER GROWTH IN ALL INTERCONNECT
ENVIRONMENTS."

mat'l. code				surface ISO 1302 ☒	tolerance ISO 406 ISO 1101	projection 	product family VCC
ltr	ecn no	dr	date	tolerances unless otherwise specified		INCH/MM scale 1:1	title VERT. CARD CONNECTOR D/R .100/2.54 CC
P				angles	linear		
				0'±2'			
				dr	M. FETROW	6/26/89	dwg no 66953
				enr	M. HAHN	6/26/89	
				chr	M. HAHN	6/26/89	type Product Customer Drawing
				appd	M. HAHN	6/26/89	
sheet index	revision sheet						

form: A3



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PRODUCT NO.	NO OF POSITIONS	DIM A	DIM B	DESC PART NUMBER ON -8XX SERIES ONLY
66953-Y01	U N A S S I G N E D			
-Y02	2 X 2	.100/2.54	.200/5.08	WWWWW-02
-Y03	2 X 3	.200/5.08	.300/7.62	WWWWW-03
-Y04	2 X 4	.300/7.62	.400/10.16	WWWWW-04
-Y05	2 X 5	.400/10.16	.500/12.70	WWWWW-05
-Y06	2 X 6	.500/12.70	.600/15.24	WWWWW-06
-Y07	2 X 7	.600/15.24	.700/17.78	WWWWW-07
-Y08	2 X 8	.700/17.78	.800/20.32	WWWWW-08
-Y09	2 X 9	.800/20.32	.900/22.86	WWWWW-09
-Y10	2 X 10	.900/22.86	1.000/25.40	WWWWW-10
-Y11	2 X 11	1.000/25.40	1.100/27.94	WWWWW-11
-Y12	2 X 12	1.100/27.94	1.200/30.48	WWWWW-12
-Y13	2 X 13	1.200/30.48	1.300/33.02	WWWWW-13
-Y14	2 X 14	1.300/33.02	1.400/35.56	WWWWW-14
-Y15	2 X 15	1.400/35.56	1.500/38.10	WWWWW-15
-Y16	2 X 16	1.500/38.10	1.600/40.64	WWWWW-16
-Y17	2 X 17	1.600/40.64	1.700/43.18	WWWWW-17
-Y18	2 X 18	1.700/43.18	1.800/45.72	WWWWW-18
-Y19	2 X 19	1.800/45.72	1.900/48.26	WWWWW-19
-Y20	2 X 20	1.900/48.26	2.000/50.80	WWWWW-20
-Y21	2 X 21	2.000/50.80	2.100/53.34	WWWWW-21
-Y22	2 X 22	2.100/53.34	2.200/55.88	WWWWW-22
-Y23	2 X 23	2.200/55.88	2.300/58.42	WWWWW-23
-Y24	2 X 24	2.300/58.42	2.400/60.96	WWWWW-24
-Y25	2 X 25	2.400/60.96	2.500/63.50	WWWWW-25
-Y26	2 X 26	2.500/63.50	2.600/66.04	WWWWW-26
-Y27	2 X 27	2.600/66.04	2.700/68.58	WWWWW-27
-Y28	2 X 28	2.700/68.58	2.800/71.12	WWWWW-28
-Y29	2 X 29	2.800/71.12	2.900/73.66	WWWWW-29
-Y30	2 X 30	2.900/73.66	3.000/76.20	WWWWW-30
-Y31	2 X 31	3.000/76.20	3.100/78.74	WWWWW-31
-Y32	2 X 32	3.100/78.74	3.200/81.28	WWWWW-32
-Y33	2 X 33	3.200/81.28	3.300/83.82	WWWWW-33
-Y34	2 X 34	3.300/83.82	3.400/86.36	WWWWW-34
-Y35	2 X 35	3.400/86.36	3.500/88.90	WWWWW-35
66953-Y36	2 X 36	3.500/88.90	3.600/91.44	WWWWW-36

OBS

LF PRODUCT NO.	NO OF POSITIONS	DIM A	DIM B	DESC PART NUMBER ON -8XX SERIES ONLY
66953-Y01LF	U N A S S I G N E D			
-Y03LF	2 X 3	.200/5.08	.300/7.62	WWWWW-03
-Y04LF	2 X 4	.300/7.62	.400/10.16	WWWWW-04
-Y05LF	2 X 5	.400/10.16	.500/12.70	WWWWW-05
-Y06LF	2 X 6	.500/12.70	.600/15.24	WWWWW-06
-Y07LF	2 X 7	.600/15.24	.700/17.78	WWWWW-07
-Y08LF	2 X 8	.700/17.78	.800/20.32	WWWWW-08
-Y09LF	2 X 9	.800/20.32	.900/22.86	WWWWW-09
-Y10LF	2 X 10	.900/22.86	1.000/25.40	WWWWW-10
-Y11LF	2 X 11	1.000/25.40	1.100/27.94	WWWWW-11
-Y12LF	2 X 12	1.100/27.94	1.200/30.48	WWWWW-12
-Y13LF	2 X 13	1.200/30.48	1.300/33.02	WWWWW-13
-Y14LF	2 X 14	1.300/33.02	1.400/35.56	WWWWW-14
-Y15LF	2 X 15	1.400/35.56	1.500/38.10	WWWWW-15
-Y16LF	2 X 16	1.500/38.10	1.600/40.64	WWWWW-16
-Y17LF	2 X 17	1.600/40.64	1.700/43.18	WWWWW-17
-Y18LF	2 X 18	1.700/43.18	1.800/45.72	WWWWW-18
-Y19LF	2 X 19	1.800/45.72	1.900/48.26	WWWWW-19
-Y20LF	2 X 20	1.900/48.26	2.000/50.80	WWWWW-20
-Y21LF	2 X 21	2.000/50.80	2.100/53.34	WWWWW-21
-Y22LF	2 X 22	2.100/53.34	2.200/55.88	WWWWW-22
-Y23LF	2 X 23	2.200/55.88	2.300/58.42	WWWWW-23
-Y24LF	2 X 24	2.300/58.42	2.400/60.96	WWWWW-24
-Y25LF	2 X 25	2.400/60.96	2.500/63.50	WWWWW-25
-Y26LF	2 X 26	2.500/63.50	2.600/66.04	WWWWW-26
-Y27LF	2 X 27	2.600/66.04	2.700/68.58	WWWWW-27
-Y28LF	2 X 28	2.700/68.58	2.800/71.12	WWWWW-28
-Y29LF	2 X 29	2.800/71.12	2.900/73.66	WWWWW-29
-Y30LF	2 X 30	2.900/73.66	3.000/76.20	WWWWW-30
-Y31LF	2 X 31	3.000/76.20	3.100/78.74	WWWWW-31
-Y32LF	2 X 32	3.100/78.74	3.200/81.28	WWWWW-32
-Y33LF	2 X 33	3.200/81.28	3.300/83.82	WWWWW-33
-Y34LF	2 X 34	3.300/83.82	3.400/86.36	WWWWW-34
-Y35LF	2 X 35	3.400/86.36	3.500/88.90	WWWWW-35
66953-Y36LF	2 X 36	3.500/88.90	3.600/91.44	WWWWW-36

mat'l. code		surface ISO 1302 ☒ ISO 406 ISO 1101		tolerance ISO 1101		projection 		product family VCC	
ltr	ecn no	dr	date	tolerances unless otherwise specified				title	
P				angles	linear	.XX±.01/.X±.3		VERT. CARD CONNECTOR	
				0'±2'		.XXX±.0.005/.XX±.13		D/R .100/2.54 CC	
						.XXXX±.0020/.XXXX.051		scale 1:1	
				dr	M. FETROW	6/26/89			dwg no
				enr	M. HAHN	6/26/89			sheet 3 of 3
				chr	M. HAHN	6/26/89			A3
				appd	M. HAHN	6/26/89			type
sheet index	revision	sheet							Product Customer Drawing

form: A3