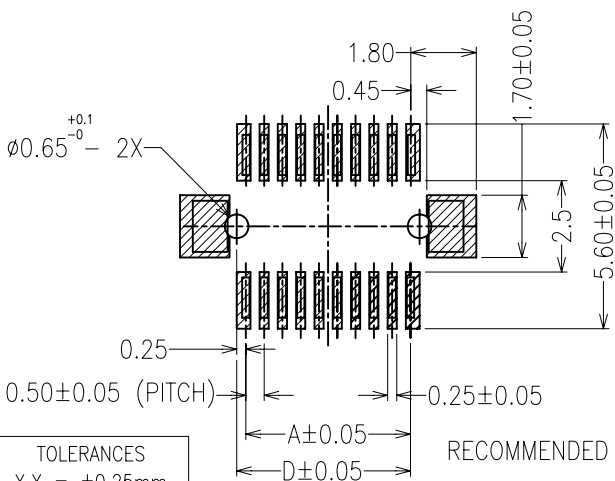


SPECIFICATIONS:

MATERIAL:-
 INSULATOR: POLYAMIDE 9T, UL94V-0
 COLOR: BLACK
 CONTACT: PHOSPHOR BRONZE
 FINISH:-
 1.3um TIN, 2.5~4um NICKEL UNDERPLATE

FOR COMPLETE SPECIFICATION, SEE COMPONENT SPECIFICATION IF AVAILABLE.

NOTES: ALL DIMENSIONS AND NOTES MARKED * ARE CRITICAL AND MUST BE CHECKED IN ACCORDANCE WITH QUALITY DOC. Q1-02A



RECOMMENDED PCB LAYOUT

TOLERANCES
 X.X = ±0.25mm
 X.XX = ±0.13mm

M/H	TYPE	H	J	K
2.0	01		1.62	
2.5		05		2.6
3.0	02		2.00	
3.5				
4.0				
5.0				
6.0				
7.0	04	1.00	3.00	2.6
8.0				
9.0				
10.0				
11.0				
4.5				
5.5				
6.5				
7.5				
8.5				
9.5				
10.5				
11.5				
12.0				
13.0				
14.0				
15.0				
16.0				
17.0				
12.5				
13.5				
14.5				
15.5				
16.5				
17.5				
05	1.50	3.50	3.6	
06	7.00	10.00	2.54	
07	7.50	10.50	2.54	

TOTAL NO. OF WAYS	A	B	C	D
10	2.0	5.0	4.0	2.5
12	2.5	5.5	4.5	3.0
14	3.0	6.0	5.0	3.5
16	3.5	6.5	5.5	4.0
18	4.0	7.0	6.0	4.5
20	4.5	7.5	6.5	5.0
22	5.0	8.0	7.0	5.5
24	5.5	8.5	7.5	6.0
26	6.0	9.0	8.0	6.5
28	6.5	9.5	8.5	7.0
30	7.0	10.0	9.0	7.5
32	7.5	10.5	9.5	8.0
34	8.0	11.0	10.0	8.5
36	8.5	11.5	10.5	9.0
38	9.0	12.0	11.0	9.5
40	9.5	12.5	11.5	10.0
42	10.0	13.0	12.0	10.5
44	10.5	13.5	12.5	11.0
46	11.0	14.0	13.0	11.5
48	11.5	14.5	13.5	12.0
50	12.0	15.0	14.0	12.5
52	12.5	15.5	14.5	13.0
54	13.0	16.0	15.0	13.5
56	13.5	16.5	15.5	14.0
58	14.0	17.0	16.0	14.5
60	14.5	17.5	16.5	15.0

TOTAL NO. OF WAYS	A	B	C	D
62	15.0	18.0	17.0	15.5
64	15.5	18.5	17.5	16.0
66	16.0	19.0	18.0	16.5
68	16.5	19.5	18.5	17.0
70	17.0	20.0	19.0	17.5
72	17.5	20.5	19.5	18.0
74	18.0	21.0	20.0	18.5
76	18.5	21.5	20.5	19.0
78	19.0	22.0	21.0	19.5
80	19.5	22.5	21.5	20.0
82	20.0	23.0	22.0	20.5
84	20.5	23.5	22.5	21.0
86	21.0	24.0	23.0	21.5
88	21.5	24.5	23.5	22.0
90	22.0	25.0	24.0	22.5
92	22.5	25.5	24.5	23.0
94	23.0	26.0	25.0	23.5
96	23.5	26.5	25.5	24.0
98	24.0	27.0	26.0	24.5
100	24.5	27.5	26.5	25.0
110	27.0	30.0	29.0	27.5
120	29.5	32.5	31.5	30.0
130	32.0	35.0	34.0	32.5
140	34.5	37.5	36.5	35.0
150	37.0	40.0	39.0	37.5
160	39.5	42.5	41.5	40.0

MSP	ISS.	DATE	C/NOTE
Allan	12	19.11.14	12693
Allan	11	21.08.09	A231
Allan	11	06.08.09	A227
Allan	10	27.08.08	A158
Allan	9	27.06.08	A137
Allan	8	04.03.08	A116
Allan	7	18.12.07	A099
Allan	6	30.10.07	A087
Allan	5	15.10.07	A085
Allan	4	03.10.07	A080
Allan	3	06.08.07	A066
Allan	2	15.03.07	A025
Allan	1	25.08.06	-

*NOTE:

- CONTACT TECHNICAL SALES FOR ALTERNATIVE OPTION
- FOR MOULDS AVAILABILITY, PLEASE REFER TO PG 2/3

ORDER CODE
M402VM-3- XXX - XX NR
 TOTAL NO. OF WAYS [] TYPE []
 (REFER TO TABLE)

APPROVED: [Signature]
 CHECKED: [Signature]
 DRAWN: Allan
 CUSTOMER REF.:
 ASSEMBLY DRG.:



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 FAX: 603 893 5396
 mis@harwin.com

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 mis@harwin.com.sg

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TOLERANCES
 X. = ±1mm
 X.X = ±0.25mm
 X.XX = ±0.10mm
 X.XXX = ±0.01mm

ANGLES = ±5°
 UNLESS STATED

MATERIAL: SEE NOTES
 FINISH: SEE NOTES
 S/AREA: mm²

TITLE:
 M402V SERIES 0.5 BOARD TO BOARD SMT V/T TYPE MALE

DRAWING NUMBER:
M402VM-3- XXX - XX NR

SHT 1 OF 3

TOTAL NO. OF WAYS	TYPE	11						12
		01	02	04	05	06	07	
10		●	●	●	●	○	○	△
12		●	●	●	●	○	○	△
14		●	●	●	●	○	○	△
16		●	●	●	○	○	○	△
18		○	○	●	●	○	○	△
20		●	●	●	○	○	○	△
22		○	●	●	○	○	○	△
24		●	●	●	●	○	○	△
26		●	○	●	●	○	○	△
28		●	●	●	●	○	○	△
30		●	●	●	●	●	○	△
32		●	●	●	○	○	○	△
34		●	●	○	●	○	○	△
36		●	●	●	○	○	○	△
38		○	○	●	○	○	○	△
40		●	●	●	●	○	○	△
42		○	○	○	○	○	○	△

TOTAL NO. OF WAYS	TYPE	11						12
		01	02	04	05	06	07	
44		●	○	○	○	○	○	△
46	△	○	○	○	○	○	○	△
48		○	○	○	○	○	○	△
50		●	●	●	●	○	○	△
52		○	○	○	●	○	○	△
54		○	○	○	○	○	○	△
56		○	○	○	○	○	○	△
58		○	○	○	○	○	○	△
60		●	●	●	●	○	○	△
62		○	○	○	○	○	○	△
64		○	○	○	○	○	○	△
66		○	○	○	○	○	○	△
68		○	○	●	●	○	○	△
70		○	●	○	○	○	○	△
72		○	○	○	○	○	○	△
74		○	○	○	○	○	○	△
76		○	○	○	○	○	○	△

TOTAL NO. OF WAYS	TYPE	11						12
		01	02	04	05	06	07	
78		○	○	○	○	○	○	△
80		●	●	●	●	○	○	△
82		○	○	○	○	○	○	△
84		○	○	○	○	○	○	△
86		○	○	○	○	○	○	△
88		○	○	○	○	○	○	△
90		○	○	○	○	●	○	△
92		○	○	○	○	○	○	△
94		○	○	○	○	○	○	△
96		○	○	○	○	○	○	△
98		○	○	○	○	○	○	△
100		○	○	○	○	○	○	△ 8 10
110		○	○	○	○	○	○	△
120		○	○	○	○	○	○	△
130		○	○	○	○	○	○	△
140		○	○	○	○	○	○	△
150		○	○	○	○	○	○	△
160		○	○	○	○	○	○	△

● - MOULDS AVAILABLE
 ○ - MOULDS UPON REQUEST.
 PLEASE REFER TECHNICAL SALES
X = OBSOLETE

MSP	ISS.	DATE	12694
Allan	13	19.11.14	A231
Allan	12	21.08.09	A227
Allan	11	06.08.09	A158
Allan	10	27.08.08	A137
Allan	9	27.06.08	A116
Allan	8	04.03.08	A099
Allan	7	18.12.07	A087
Allan	6	30.10.07	A085
Allan	5	15.10.07	A080
Allan	4	03.10.07	A066
Allan	3	06.08.07	A025
Allan	2	15.03.07	-
Allan	1	25.08.06	-

NAME	ISS.	DATE	C/NOTE

APPROVED: _____
 CHECKED: *Ben*

ORDER CODE
M402VM-3- XXX - XX NR

TOTAL NO. OF WAYS TYPE
 (REFER TO TABLE)

DRAWN: Allan
 CUSTOMER REF.:
 ASSEMBLY DRG.:



HARWIN USA TEL: 603 893 5376 FAX: 603 893 5396 mis@harwin.com	HARWIN Europe (UK) TEL: 023 9231 4545 FAX: 023 9231 4590 mis@harwin.co.uk	HARWIN Asia TEL: +65 6 779 4909 FAX: +65 6 779 3868 mis@harwin.com.sg
--	--	--

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TOLERANCES
 X. = ±1mm
 X.X = ±0.25mm
 X.XX = ±0.10mm
 X.XXX = ±0.01mm

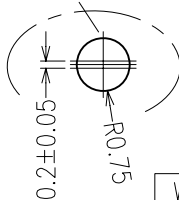
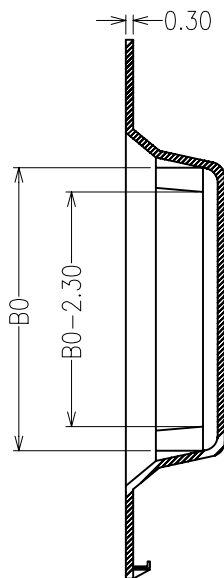
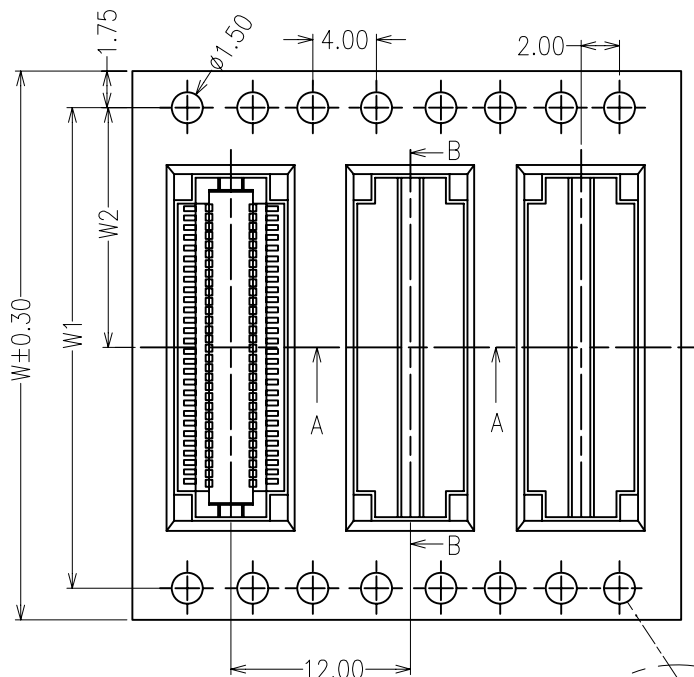
ANGLES = ±5°
 UNLESS STATED

MATERIAL: SEE NOTES
 FINISH: SEE NOTES
 S/AREA: mm²

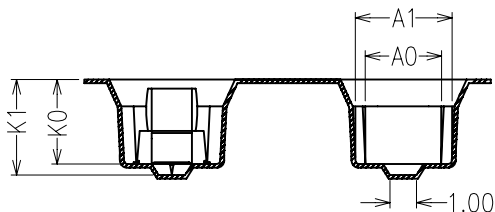
TITLE:
M402V SERIES 0.5 BOARD TO BOARD SMT V/T TYPE MALE

DRAWING NUMBER:
M402VM-3- XXX - XX NR

SHT 2 OF 3



W	W1	W2
16	/	7.50
24	/	11.50
32	28.40	14.20
44	40.40	20.20
56	52.40	26.20



SECTION A-A

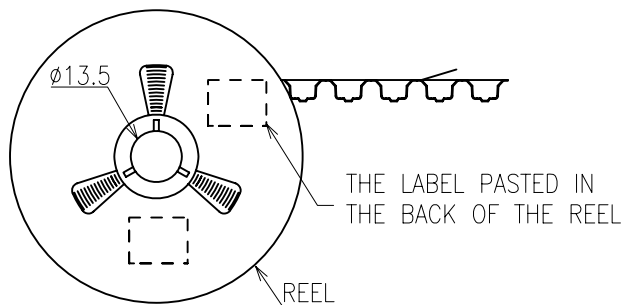
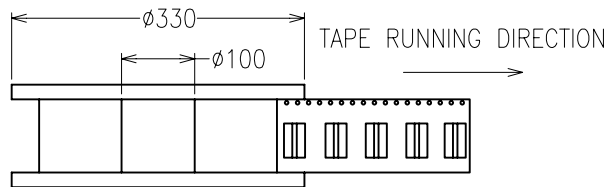
- NOTES:
- 10 SPROCKET HOLE PITCH CUMULATIVE TOLERANCE ± 0.20
 - CARRIER CAMBER IS WITHIN 1MM IN 250MM
 - MATERIAL: BLACK CONDUCTIVE POLYSTYRENE ALLOY

CKT	10	14	18	22	26	30	34	38	42	46
PIN	10 12	14 16	18 20	22 24	26 28	30 32	34 36	38 40	42 44	46 48
W	016	016	016	016	024	024	024	024	024	024
BO	5.75	6.75	7.75	8.75	9.75	10.75	11.75	12.75	13.75	14.75

CKT	50	54	58	62	66	70	74	78	82	86
PIN	50 52	54 56	58 60	62 64	66 68	70 72	74 76	78 80	82 84	86 88
W	024	032	032	032	032	032	044	044	044	044
BO	15.75	16.75	17.75	18.75	19.75	20.75	21.75	22.75	23.75	24.75

CKT	90	94	98	B0	C0	D0	E0	F0	G0
PIN	90 92	94 96	98 A0	B0	C0	D0	E0	F0	G0
W	044	044	044	044	056	056	056	056	056
BO	25.75	26.75	27.75	30.25	32.75	35.25	37.75	40.25	42.75

ITEM	A0	A1	K0	K1	PITCH	PCS/REEL
DIM	4.30	6.00	3.30	3.90	12.00	1500



MSP	13	19.11.14	12693
Allan	12	21.08.09	A231
Allan	11	06.08.09	A227
Allan	10	27.08.08	A158
Allan	9	27.06.08	A137
Allan	8	04.03.08	A116
Allan	7	18.12.07	A099
Allan	6	30.10.07	A087
Allan	5	15.10.07	A085
Allan	4	03.10.07	A080
Allan	3	06.08.07	A066
Htut	2	14.03.07	A025

NAME	ISS.	DATE	C/NOTE
APPROVED:			
CHECKED:			
DRAWN:	Htut	Htut	
CUSTOMER REF.:			
ASSEMBLY DRG:			

APPROVED:	
CHECKED:	<i>Htut</i>
DRAWN:	Htut Htut
CUSTOMER REF.:	
ASSEMBLY DRG:	

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TOLERANCES
X. = ± 1 mm
X.X = ± 0.20 mm
X.XX = ± 0.10 mm
X.XXX = ± 0.01 mm
ANGLES = $\pm 0^{\circ}30'$
UNLESS STATED

MATERIAL: SEE NOTES
FINISH: SEE NOTES
S/AREA: mm²

TITLE: M402V SERIES 0.5 BOARD TO BOARD SMT V/T TYPE MALE
DRAWING NUMBER: M402VM-3- XXX - XX NR
SHT 3 OF 3