

spec ref	-	dr	Hai-Ling Liu	2014/07/10	Amphenol Power Solutions A Division of Amphenol Corporation amphenol-hcc.com	MM	scale	size
tolerance std	ISO 406 ISO 1101	eng	Laven Wang	2025/04/22		ec n no	1:1	A2
TOLERANCES UNLESS OTHERWISE SPECIFIED		r w r	-	-		rel level	Released	
surface	linear	0.X	±0.5	projection	VERT REC - ENHANCED WALLS	dig no	10130904	rev
		0.XX	±0.25		HIGH POWER CARD EDGE - UNIVERSAL DRAWING product family	cat. no.		C
		0.XXX	±0.10					
ASME Y14.5	angular	0°	±2°	Product - Customer Drw		sheet 1 of 4		

PDS: Rev :C

STATUS:Released

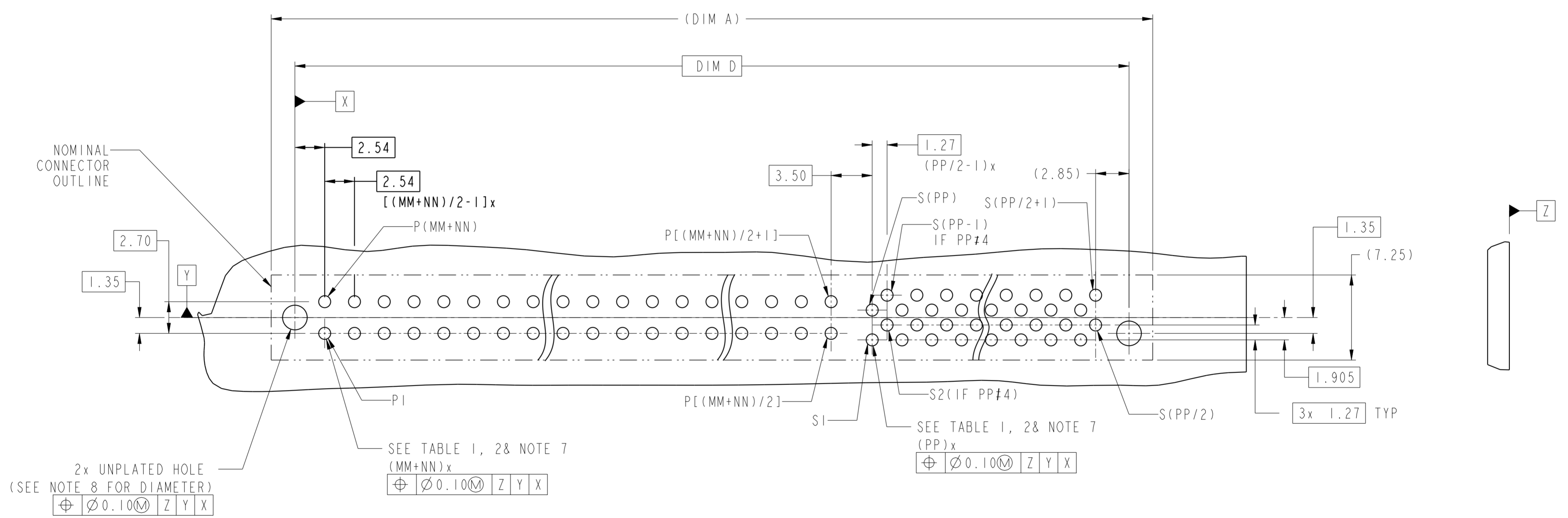
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CONTACT TYPE	TOP LAYER DESCRIPTION	TABLE 1 (HPCE / SOLDER TAILS) PLATED THROUGH-HOLE REQUIREMENTS				
		DRILLED HOLE DIAMETER	COPPER THICKNESS	TIN-LEAD THICKNESS	TIN THICKNESS	FINISHED HOLE DIAMETER
POWER & SIGNAL	TIN-LEAD	1.10-1.16 (1.15 DRILL)	0.025 - 0.050	0.005 - 0.015	--	0.94 - 1.10
	IMMERSION TIN	1.10-1.16 (1.15 DRILL)	0.025 - 0.050	--	0.9 - 1.5um	0.94 - 1.10
	COPPER	1.10-1.16 (1.15 DRILL)	0.025 - 0.050	--	--	0.94 - 1.10

CONTACT TYPE	TOP LAYER DESCRIPTION	TABLE 2 (HPCE / PRESS-FIT TAILS) PLATED THROUGH-HOLE REQUIREMENTS				
		DRILLED HOLE DIAMETER	COPPER THICKNESS	TIN-LEAD THICKNESS	TIN THICKNESS	FINISHED HOLE DIAMETER
POWER & SIGNAL	TIN-LEAD	0.81-0.86 (0.85 DRILL)	0.025 - 0.050	0.005 - 0.015	--	0.65 - 0.80
	IMMERSION TIN	0.81-0.86 (0.85 DRILL)	0.025 - 0.050	--	0.9 - 1.5um	0.70 - 0.80
	COPPER	0.81-0.86 (0.85 DRILL)	0.025 - 0.050	--	--	0.70 - 0.80

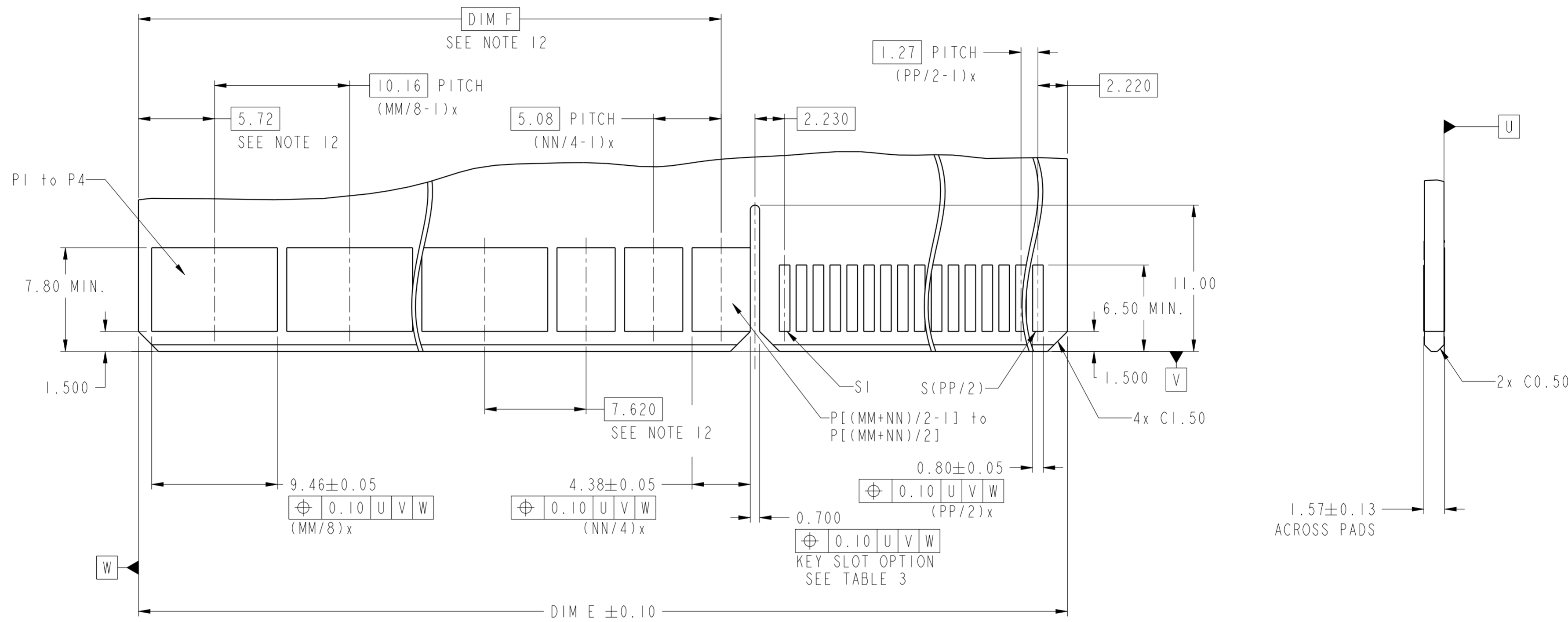


RECOMMENDED PCB LAYOUT
DIMENSION TOLERANCE IS ± 0.05 mm

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tolerance std	ISO 406 ISO 1101	eng	Laven Wang	2025/04/22		ec n no	ELX-DG-55243-1	rel level	Released		
surface	ASME Y14.5	fwvr	-	-		app r	Zheng, Pei-Min	2025/05/16	product family	Product - Customer Drw	
TOLERANCES UNLESS OTHERWISE SPECIFIED linear: 0.X ±0.5, 0.XX ±0.25, 0.XXX ±0.10 angular: 0° ±2°		projection			title	VERT REC - ENHANCED WALLS HIGH POWER CARD EDGE - UNIVERSAL DRAWING		dig no	10130904	rev	C
sheet 2 of 4											



RECOMMENDED EDGE CARD LAYOUT
DIMENSION TOLERANCE IS ± 0.05 mm

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TOLERANCES UNLESS OTHERWISE SPECIFIED		fwvr	-	-		rel level	Released	
surface	linear	appr	Zheng, Pei-Min	2025/05/16	product family	VERT REC - ENHANCED WALLS	dig no	10130904
ASME Y14.5	angular	projection			product family	HIGH POWER CARD EDGE - UNIVERSAL DRAWING	cat. no.	
	0.X				Product	Customer Drw	rev	C
	0.XX				Product	Customer Drw	sheet 3 of 4	
	0.XXX							
	0°							

10130904 - MM NN PP LF

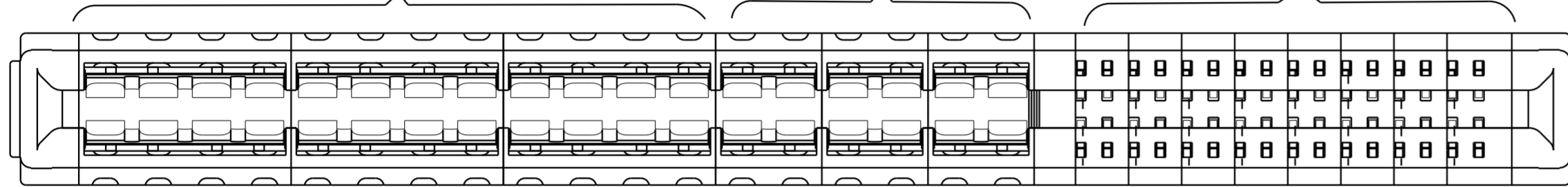
LEAD FREE

Polarization Key Option	A	B	C	D
	Y	Y	N	N
Tail Type Note 10	STB	PF	STB	PF

QUAD PWR BEAM QTY
(NEXT TO LEFT END)

DUAL PWR BEAM QTY
(NEXT TO SIGNAL)

SIGNAL CONTACT QTY



Example: The configuration above is 10130904-241232BLF

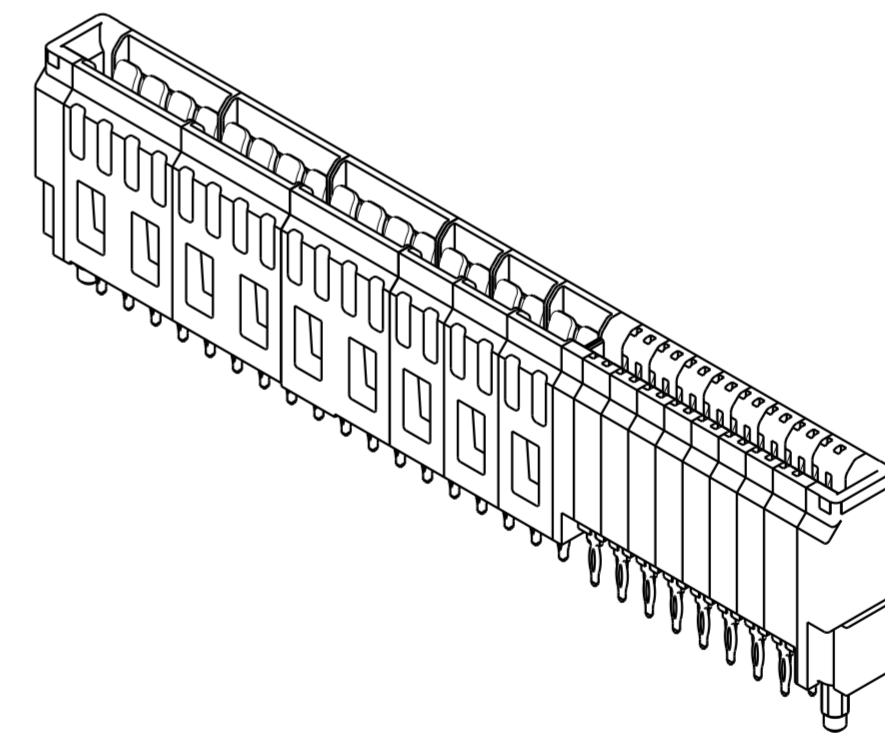
VERT Press fit 36P32S with polarization key. 24P is Quad beam contact, 12P is dual beam contact.

TABLE 3. PART NUMBER CODE. HPCE VERT P+S CONFIG

NOTES:

- CONNECTOR MATERIALS:
HOUSING: HIGH TEMPERATURE THERMAL PLASTIC, BLACK
UL 94V-0 COMPLIANT
CONTACTS: HIGH PERFORMANCE COPPER ALLOY.
- CONTACT FINISH REF. GS-12-604 SECTION 5.2.
- PRODUCT SPECIFICATION: GS-12-604.
- APPLICATION SPECIFICATION: GS-20-128.
- PRODUCT MARKING ON HOUSING IN AREA SHOWN MEETS AFCI SPECIFICATION: GS-24-007.
- PACKAGING MEETS FCI SPECIFICATION GS-14-937.
- ALL HOLE SIZES ARE FINISHED HOLE SIZES.
- MOUNTING HOLES ARE UNPLATED
 \varnothing 2.40 +/- 0.1 FOR PRESS-FIT TAILS
 \varnothing 2.18 +/- 0.03 FOR SOLDER TAILS
- PRESS FIT APPLICATION TOOL DRAWING : 10119453.
- STB= Solder to board, 1.57-2.38mm PCB thickness.
PF = Press fit, 1.57mm minimum PCB thickness.
- MAXIMUM OVERALL LENGTH IS 100mm.
- DIM IS NOT APPLICABLE IF NO 4 BEAM CONTACT OR 2 BEAM CONTACT.
- A SYMBOL \triangle WILL BE NEXT TO ANY DIMENSION, VIEW, OR NOTE WHICH HAS BEEN MODIFIED WITH THE CURRENT DRAWING REVISION.

DIM	TABLE 2. LENGTH FORMULAS.
DIM A	$(MM/8) \times 10.16 + (NN/4) \times 5.08 + (PP/2) \times 1.27 + 9.12$
DIM B	DIM "A" - 5.00
DIM C	DIM "A" - 0.94
DIM D	DIM "A" - 4.04
DIM E	DIM "A" - 5.30
DIM F	$(MM/8-1) \times 10.16 + (NN/4-1) \times 5.08 + 13.34$ (WITH 4 BEAM CONTACT)
	$(NN/4-1) \times 5.08 + 3.18$ (WITHOUT 4 BEAM CONTACT) \triangle



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ASME Y14.5	angular	0°	±2°		product family	Product - Customer Drw	sheet	4 of 4

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