

REFERENCE SPECIFICATIONS

- IEC 61076-4-104
- EIA-616
- IEC-512 (TESTS PROCEDURE)

PHYSICAL CHARACTERISTICS

HOUSING MATERIAL:
 - HM1xxxxxxxxHx(P) / zzzzz-xyy(P) :LCP NATURAL COLOR-HIGH TEMPERATURE RANGE /UL94V0
 HM1xxxxxxxxHx(P)LF / zzzzz-xyy(P)LF
 - CONTACT MATERIAL: -PHOSPHOR BRONZE - MALE and FEMALE CONTACT

ELECTRICAL CHARACTERISTICS

- MAXIMUM RATING CURRENT: Signal contact: 2A at 20°C / 1.5A at 70°C
 Power blade contact: 4A at 20°C / 2.75A at 70°C
- NOMINAL CURRENT: signal: 1.5A , power blade: 3A (STANDARD CONDITIONS)
- * CONTACT RESISTANCE: Signal <20ma / Power blade <10ma (ALL rows)
- VOLTAGE PROOF: >1000 V ac
- INSULATION RESISTANCE: >5000 Ma
- CREEPAGE AND CLEARANCE DISTANCE: >0.6 mm
- WIPPING/PLUG IN DIRECTION: >2mm (MALE CONTACT 5mm LENGTH)
- * CAPACITANCE: tr=1nS-Z=50a-C<2pF (Adjacent Lines signal contact only)
- * INDUCTANCE: tr=1nS-Z=50a-L<25nH (Adjacent Lines signal contact only)
- * PROPAGATION DELAY: tr=500pS-Z=50a- TPD<225pS - SKEW ROW TO ROW<40pS (signal contact)
- CROSS TALK: (TBD)
- TDR REFLECTION ANALYSIS: (TBD)

MECHANICAL CHARACTERISTICS

- * INSERTION AND WITHDRAWAL FORCE:Signal <n x 0.37 N / Power <n x 1.50N (n=Number of CTS)
- GAUGE RETENTION FORCE: Signal>0.15 N / Power>0.30N (GAUGE PM)
 THICKNESS GAUGE = 0.485 ±0.005 / SURFACE ROUGHNESS: Ra = 0.10µ MINI - 0.25µ MAXI
- * NORMAL FORCE: Signal 0.65 N ±0.15N / Power 0.65 N ±0.15N Per contact beam
- * HERTZ STRESS: >200 KPSI
- CONTACT RETENTION IN INSULATOR: ->10 N (MALE CONTACT)
 ->5 N (FEMALE CONTACT)
- VIBRATIONS: 10-2000 HZ/ 1.5mm OR 20g /3 x 2 HRS -Interruption < 1µs
 (NOT APPLICABLE FOR PL3)
- SHOCK: ACC. HALF SINE 490m/s2-11m.s-6x3 SHOCKS - Interruption < 1µs
- (*) - FOR STR HDR + RA RECEIPT - F

PERFORMANCE LEVELS (PLATING)

HM1xxxxxxxxHxP (LF) / zzzzz-xyyP (LF) Trays packaging
 HM1xxxxxxxxHx(LF) / zzzzz-xyy(LF) Tubes packaging

- 000H4 (LF) / NA =PL3 OF IEC 61076-4-104 /NO GAS
- 000H6 (LF) / zzzzz-3yy(LF) =PL1 of IEC 61076-4-104/2 GASES -10 DAYS
- 040H0 (LF) / zzzzz-1yy(LF)=TELCORDIA CENTRAL OFFICE /4 GASES
- 000H7 (LF) / zzzzz-7yy(LF)= (SPECIFIC FOR E//)

ENVIRONMENTAL CHARACTERISTICS

- CLIMATIC CATEGORY: TEMPERATURE RANGE -55°C TO +125°C / DAMP HEAT STEADY STATE 56 DAYS
- ELECTRICAL LOAD AND TEMPERATURE: T=+70°C / I=0.5A PER CTS - 1000 Hrs

METALLIZED HOLE DIMENSIONS

		PRESS-FIT TERMINATION Ø0.7 PTH		
		TIN LEAD HoLes	Pur TIN HoLes	COPPER OSP HoLes
P.C.B HOLE DEFINITION (NOTE-1 AND 2)	DRILL DIAMETER	Ø 0.85 REF (NOTE-3)	Ø 0.85 REF (NOTE-3)	Ø 0.85 REF (NOTE-3)
	DRILLED HOLE	Ø 0.86-0.81	Ø 0.86-0.81	Ø 0.86-0.81
	COPPER UnderPlating	25µ mini-50µ maxi	25µ mini-50µ maxi	25µ mini-50µ MAXI
	TIN-LEAD PLATING (SnPb)	5µ mini-15µ maxi		
	Pure TIN PLATING (Sn)		0.8µ mini-1.2µ maxi	
OSP PLATING (Copper)			0.2µ mini-0.5µ maxi	
FINISH HOLE (NOTE-4)		Ø 0.65-0.80	Ø 0.69-Ø 0.80	Ø 0.70-Ø 0.80

- NOTE-1: THESE DIMENSIONS MUST BE RESPECT TO SECURE PRESS-FIT PIN PERFORMANCES.
- NOTE-2: ACCORDING TO IEC-352-5 SPEC.
- NOTE-3: MAJOR REQUIREMENT FOR PRESS FIT PIN PERFORMANCE
- NOTE-4: DIMENSIONS AFTER REFLOW FOR Pure TIN and TIN LEAD HOLE

PRESS FIT PERFORMANCES

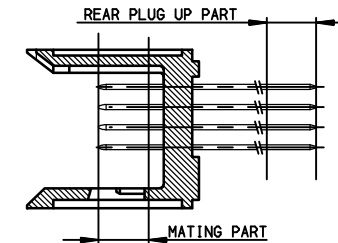
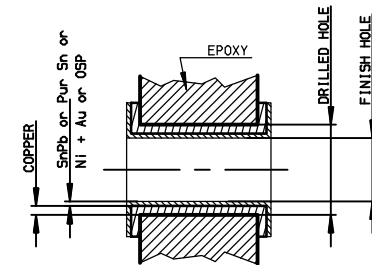
		EON + SPECIFIED HOLE DIM
INSERTION FORCE	TIN LEAD PLATED	< 55 N
	Pure TIN PLATED	> 20 N
EXTRACTION	Pure TIN PLATED	> 20 N
	Cu PLATED PTH	> 15 N

CONTACT PLATING

- Pur TIN or TIN LEAD on PFIT areas
- FEMALE CONTACT:**
 - GOLD OVER NICKEL ON MATING SURFACES
- MALE CONTACTS:**
 - GOLD OVER NICKEL ON MATING SURFACES
 - GOLD OVER NICKEL ON REAR PLUG UP PART
- (APPLICABLE FOR TERMINATION LENGTH > 11.8 MM)

LEAD FREE:RoHS INFORMATIONS

- The "LF" products meet European union Directives and other country regulations as described in 65-22-008.
- Termination plating spec: 0.5 to 3 µm Nickel, 0.5 to 1.5 µm Sn (pure matte)
- Packaging spec: see 65-14-920



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European Views

www.fciconnect.com		surface ISO 1302 ✓	tolerance std ISO 406 ISO 1101	projection mm
TOLERANCES UNLESS OTHERWISE SPECIFIED				
Dr	M LENOIR	2005/02/08	ANGULAR	LINEAR
Eng	M LENOIR	2005/02/08	0.X	±0.1
Chr	Ph Legare	2005/02/08	0.XX	±0.1
Appr	Ph Legare	2005/02/08	0.XXX	±0.1
Product family			METRAL	
title		HM1 PFIT SIGNAL/POWER BLA		Rev.
catalog no		-		E
size		A3		Scale 1:1
size		ECN		LS06-0097
spec ref		-		
customer		C-8626-000P		sheet 1 of 1

rev	ecn no	dr	date
D	LS05-0039	MLE	2004/03/05
E	LS06-0097	LGO	2006/07/26
-	-	-	-
-	-	-	-
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