

# **SPECIFICATION**

**DESCRIPTION: 1.27mm SMT TYPE PLCC SOCKET** 

## 1. MATERIAL:

ITEM	DESCRIPTION	REQUIREMENT
1-1	Insulator	PPS + 40% G.F. (UL94V-0)
1-2	Contact	Phosphor Bronze
1-3	Plating	Gold / Tin over Nickel Plated

## 2. CHARACTERISTICS:

ITEM	DESCRIPTION	REQUIREMENT
2-1	Current rating	1 A AC, DC
2-2	Voltage rating	250 V AC, DC
2-3	Temperature rating	-55°C ~ 105°C

3. Construction and dimensions shall be in accordance with the referenced drawings.

#### 4. ELECTRICAL PERFORMANCE:

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
4-1	Dielectric withstanding	Unmated connector shall be tested	No evidence of breakdown and
	Voltage	in accordance with method 3001.1	flashover
		of MIL-STD-1344A when the AC	
		600 V rms for one minute applied	
		between adjacent contacts.	
4-2	Insulation resistance	It should be tested in accordance	Initial:10000 Megaohms min. After
		with method 3003.1 of	humidity and thermal shock test:
		MIL-STD-1344A.	1000 Megaohms min.
4-3	Contact resistance	It should be tested in accordance	Initial: 20 miliohms max.
		with method 3004.1 of	After environmental test: 40
		MIL-STD-1344A.	miliohms max.

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# 5. MECHANICAL PERFORMANCE:

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DESCRIPTION	TEST CONDITION	REQUIREMENT
<b>Contact retention force</b>	Contact mounted in a housing 250 gram min.	
	shall be pulled in an alignment at	
	a constant speed of 25mm/minute.	
Insertion force	Housing with contact mating	50 gram max.
	header at a constant speed of	
	25mm/minute.	
Withdrawal force	Housing with contact mating	10 gram min.
	header, pull out from header at	
	speed 25mm/minute.	
Durability	It should be tested in accordance	No defects.
	with method 2016 of	Contact resistance shall be 20
	MIL-STD-1344A. Connector shall	miliohms max.
	be subject to 30 cycles of insertion	
	and withdrawal.	
Vibration	The connector mated PCB shall	No evidence of loosening of parts or
	be vibrated in accordance with	electric discontinuity.
	method 2005.1 of	Contact resistance less than twice of
	MIL-STD-1344A test condition B.	initial.
	There shall be no current	
	discontinuity longer than 1	
	microsecond during the test.	
	Frequency: 10-2000-10 Hz/20min.	
	Amplitude: 1.5mm(10Hz-54Hz)	
	Acceleration: 15G(55Hz-2000Hz)	
	Period: 4 hours for each direction	
	Direction: X, Y, Z	
	DESCRIPTION Contact retention force Insertion force Withdrawal force Durability	Contact retention force  Contact mounted in a housing shall be pulled in an alignment at a constant speed of 25mm/minute.  Insertion force  Housing with contact mating header at a constant speed of 25mm/minute.  Withdrawal force  Housing with contact mating header, pull out from header at speed 25mm/minute.  Durability  It should be tested in accordance with method 2016 of MIL-STD-1344A. Connector shall be subject to 30 cycles of insertion and withdrawal.  Vibration  The connector mated PCB shall be vibrated in accordance with method 2005.1 of MIL-STD-1344A test condition B. There shall be no current discontinuity longer than 1 microsecond during the test.  Frequency: 10-2000-10 Hz/20min. Amplitude: 1.5mm(10Hz-54Hz) Acceleration: 15G(55Hz-2000Hz) Period: 4 hours for each direction

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## **6. ENVIRONMENTAL PERFORMANCE:**

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
6-1	Humidity	The unmated connector shall be Tested in accordance with method 1002.2 of MIL-STD-1344A test procedure type I condition B. Temperature : $40 \pm 2^{\circ}$ C Humidity : $90 \sim 95$ % (RH) Period : 48 hours.	No damage. Contact resistance less than twice of initial. Insulation resistance: to pass para. 4-2. Dielectric withstanding voltage: to pass para 4-1.
6-2	Thermal Shock	Connector shall be subjected to thermal shock cycling in accordance with method 107E. of MIL-STD-202F condition B. one cycle consists of: -25 °C for 30 minutes. +105 °C for 30 minutes. Time of cycle: 25 cycles.	No damage. Contact resistance less than twice of initial. Insulation resistance: to pass para. 4-2. Dielectric withstanding voltage: to pass para 4-1.
6-3	Salt spray	Connector shall be tested in accordance with method 1001.1 of MIL-STD-1344A condition B. Temperature: $35 \pm 2^{\circ}$ C Density: 5 % in weight. Period: 48 hours.	No damage.  Contact resistance less than twice of initial.
6-4	Solderability	Connector termination ends shall be checked for solderability in accordance with method 208 of MIL-STD-202F. Solder temperature: $230 \pm 5^{\circ}$ C Immersion period: $5 \pm 0.5$ sec.	No damage. Minimum : 95% of immersed area.
6-5	Resistance to soldering heat	Specimen shall be mounted on PCB. Solder temperature: 260 ± 5°C Immersion period: 5 ± 0.5 sec.	No damage and deformation.

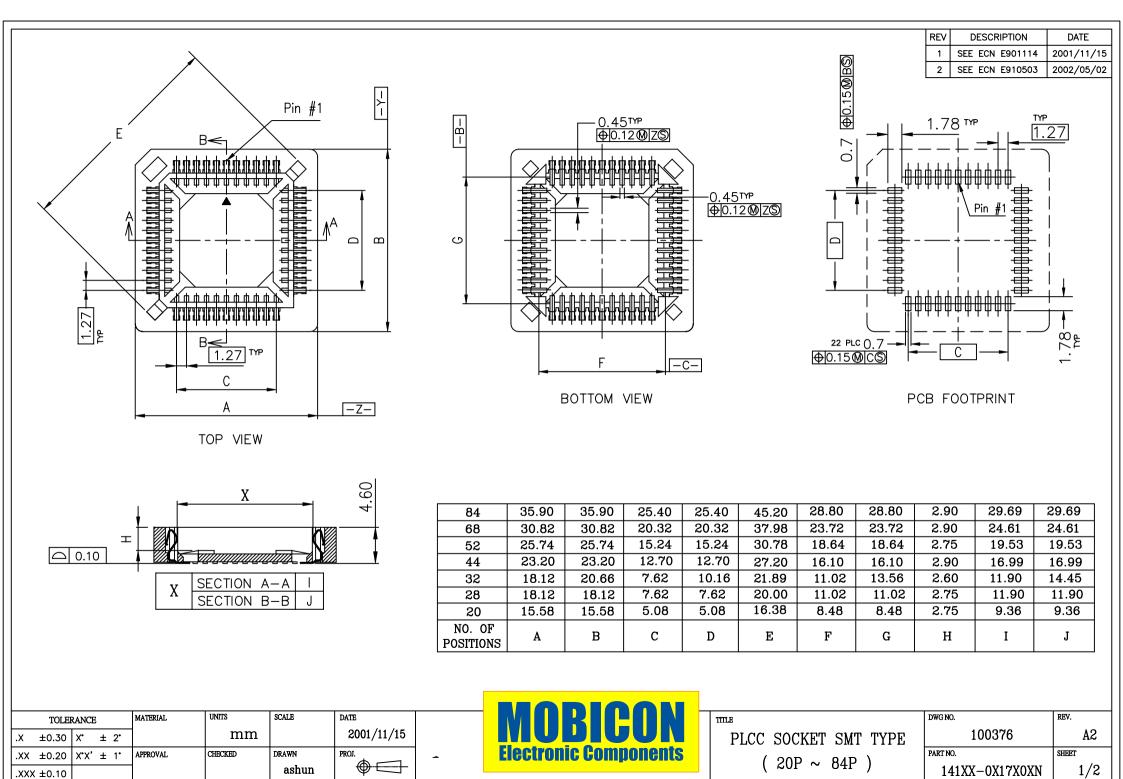
APPR BY:	CHKD BY:	SPEC BY:
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# MATERIAL:

HOUSING: PPS+40% GF UL94 V-0, Brown.

CONTACT: Phosphor Bronze.

# FINISH:

CONTACT:  $100\mu$ " Min. Tin/Lead plated on soldering

end over  $50\mu$ " Min. Nickel under-plating.

## SPECIFICATION:

Current Rating: 1 A. Voltage Rating: 250 V.

Dielectric Strength: 600V for one minute.

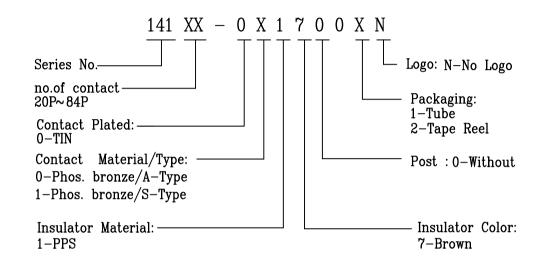
Contact Resistance: 20  $m\Omega$  MAX.

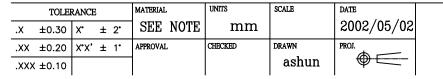
Insulator Resistance:  $1000M\Omega$  min. at 500V DC.

Temperature:  $-55^{\circ}\text{C} \sim +105^{\circ}\text{C}$ 

Durability: 25 Cycles.

### ORDER INFORMATION:







IIILE			
PLCC	SOCKET	SMT	TYPE
(	20P ~	84P	)

DWG NO.	REV.
100376	A2
PART NO.	SHEET
141XX-0X17X0XN	2/2