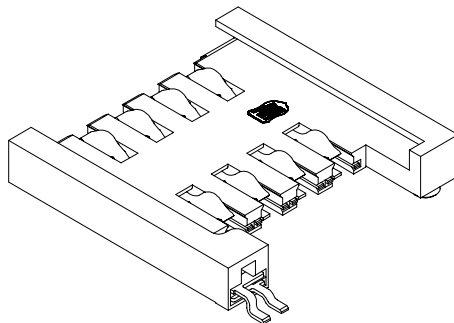


**SPECIFICATION  
OF  
SIM CARD CONNECTOR**

Model NO.:        ICC-311  
Revision:         1.1  
Issue Date:        AUG. 01, 2005



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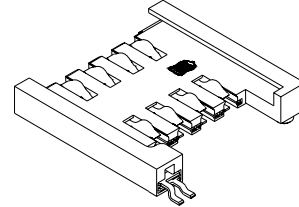
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## 1. INTRODUCTION

### General:

The ICC-311 is an interface device for GSM11.11 SIM card. It is designed for high performance and flexibility to give prospective customers a quick applications of the individual devices in their product series, and to facilitate selection if the device it decides that are best-suited to intended target applications.



### Features:

- ◆ GSM 11.11 Standard SIM Card. <sup>(note)</sup>
- ◆ Compact Physical Size for Multi-Purpose Application.
- ◆ High Reliability Low-Friction Contact Extension operation Life of Contact.

### Applications:

- ◆ Access Control Terminals.
- ◆ Terminal Identification module.
- ◆ Telecommunication.
- ◆ Palm Top Machines.
- ◆ Other Identification recognition.

**Note:** All trademarks mentioned herein are the property of their respective companies.

## 2. TECHNICAL CHARACTERISTICS

### 2.1 General Characteristics:

Items	Standard	Description
Dimension		15.70L x 16.40W x 2.60H mm
Weight		Approx. 0.45 g
Card size	GSM 11.11	25.0 x 15.0 x 0.76 mm
Contact principle		Friction technology
Operating position		Shaft up / Down / Horizontal
Mounting System		SMT Type (post optional)
Durability		10,000 cycles min.

### 2.2 Electrical Characteristics: According to Standard IEC512

Items	Standard	Description
2.2.1 Data Contacts		
Number of contacts (optional)		6, 8 pins
Contact resistance	IEC512-2-2a	50 m $\Omega$ typical, 100 m $\Omega$ max.
Insulation resistance Pin to pin	IEC512-2-3a	> 1000 M $\Omega$ / 500 V DC
Rated voltage		< 50 V
Rated current		1 A max., 10 $\mu$ A min.
Dielectric withstanding voltage	IEC512-2-4a	500 V AC rms 1 min. (sea level)
2.2.2 Card Detector & Switch		
Switch type		Blade
Operation		Normally Open
Contact resistance	IEC512-2-2a	50 m $\Omega$ typical, 100 m $\Omega$ max.
Insulation resistance Pin to pin	IEC512-2-3a	> 1000 M $\Omega$ / 500 V DC
Rated voltage		< 50 V
Rated current		1 A max., 10 $\mu$ A min.
Dielectric withstanding voltage	IEC512-2-4a	500 V AC rms 1 min. (sea level)

### 2.3 Mechanical Characteristics:

Items	Standard	Description
Contact force		0.4N ~ 0.8N
Contact location	GSM 11.11	
2.3.1 Data Contacts		
Material		Phosphor bronze
Plating		Gold over Nickel
2.3.2 Card Detector & Switch		
Material		Phosphor bronze
Plating		Gold over Nickel
Insulation material		Thermoplastic, UL 94V-0

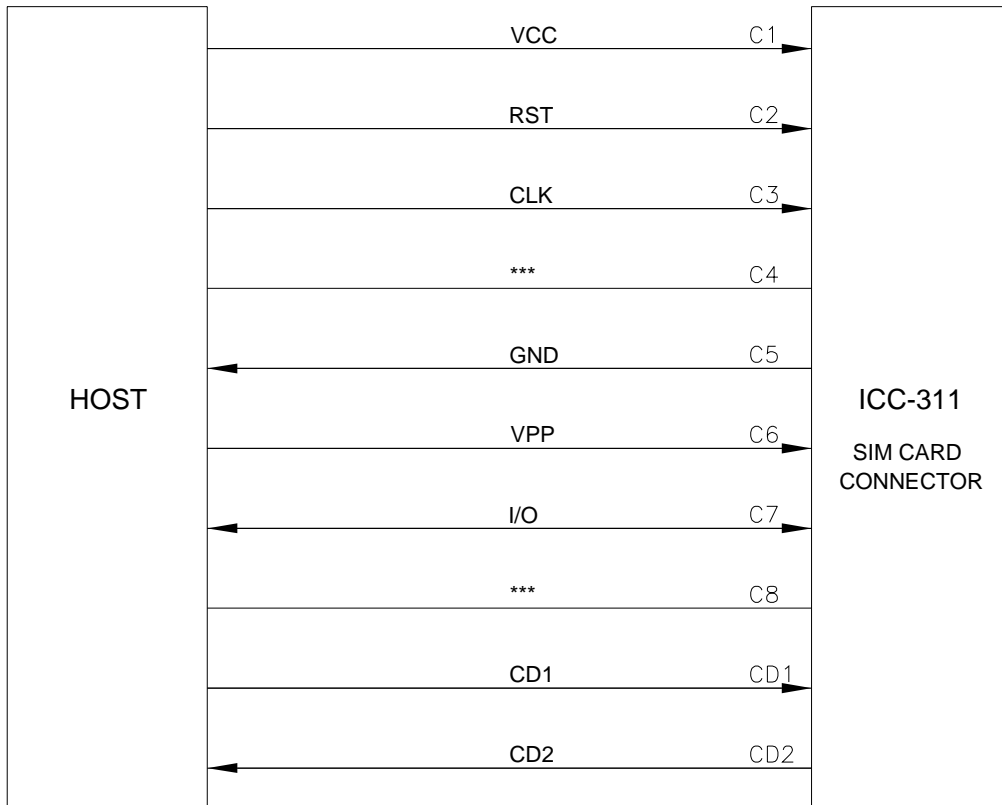
**2.4 Solderability:** According to Standard IEC68

Items	Standard	Description
Wave		Not applicable
IR reflow		260°C, 10 sec. Max.
Manual soldering	IEC68-2-20	360°C, 3 sec. Max.

**2.5 Environmental Characteristics:** According to Standard IEC68

Items	Standard	Description
Operating temperature		- 40°C ~ + 85°C
Operating humidity		10 % ~ 95 % RH
Storage temperature		- 40°C ~ + 85°C
Storage humidity		10 % ~ 95 % RH

3. INTERFACE

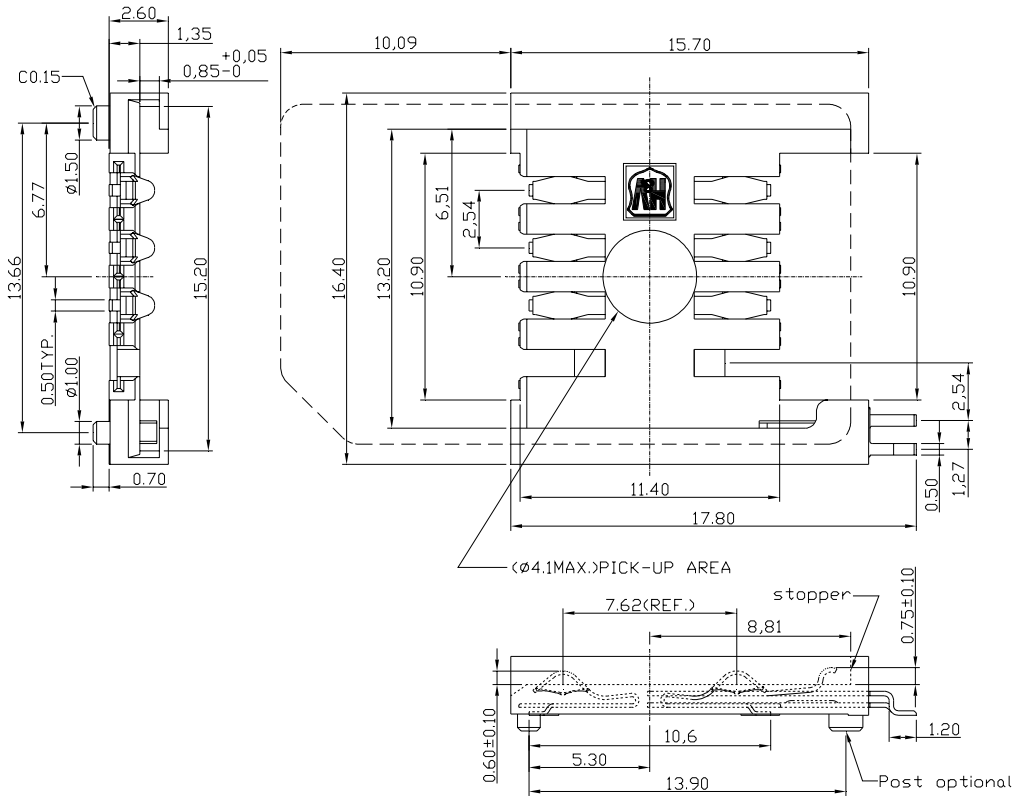


3.1 Signals

Signal interface connections for ICC-311 are shown below.

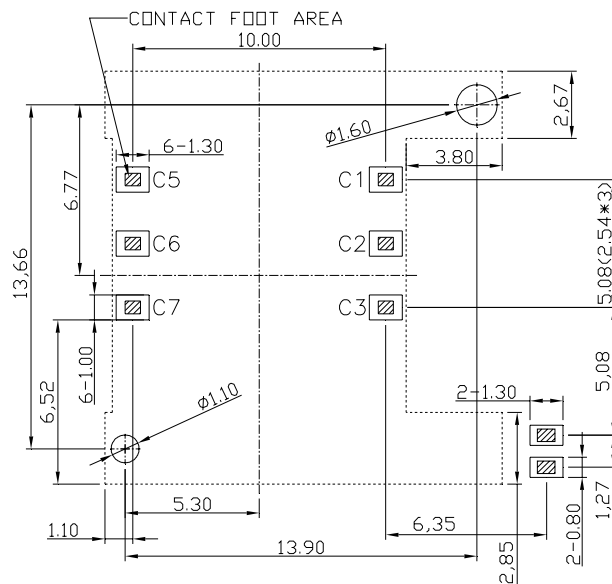
Contact No.	Assignment	Description	Remark
C1	VCC	Power Voltage	
C2	RST	Reset Signal	
C3	CLK	Clocking Signal	
C4	***	Reserved for feature use	
C5	GND	Power and Signal Ground	
C6	VPP	Programming Voltage	
C7	I/O	Serial Data input/output	
C8	***	Reserved for feature use	
CD1	CD1	Contact 1 of card present switch	
CD2	CD2	Contact 2 of card present switch	

4. MECHANICAL OUTLINE DRAWING



Unit: mm; Tolerances:  $\pm 0.15$  mm

Figure 4.1 Mechanical outline dimension (6 pins)



Unit: mm; Tolerances:  $\pm 0.15$  mm

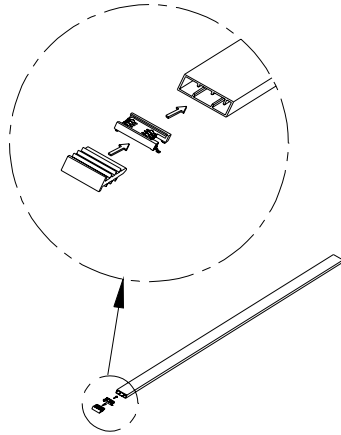
Figure 4.2 Reference dimension for PCB layout (6 pins)



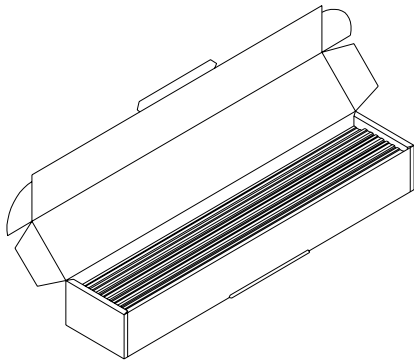


**APPENDIX A: PACKING INFORMATION**

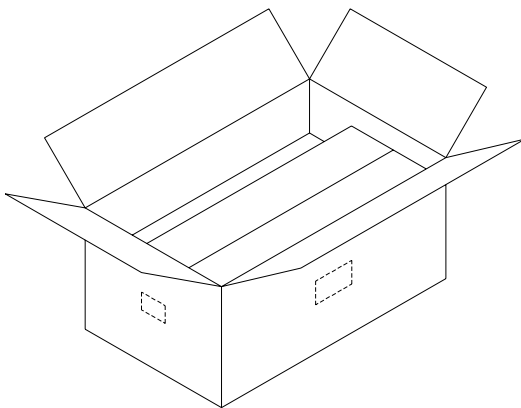
**A1: Carrier Tube**



**Q'TY:** 25 PCs per tube  
**Meas.:** 46.0L x 20.0W x 0.7H CM

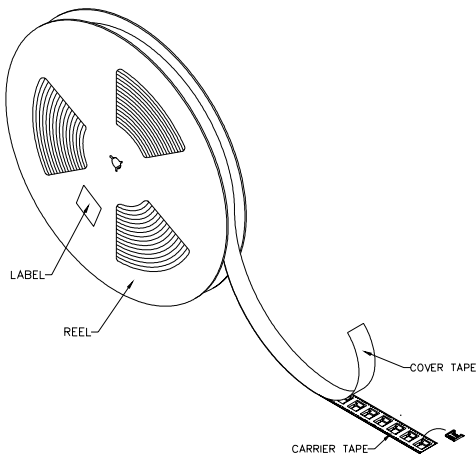


**N.W.:** 1.3 KGS  
**G.W.:** 1.4 KGS  
**Q'TY:** 1,000 PCs per box  
(40 tubes set in order)  
**Meas.:** 49.0L x 9.4W x 6.1H CM

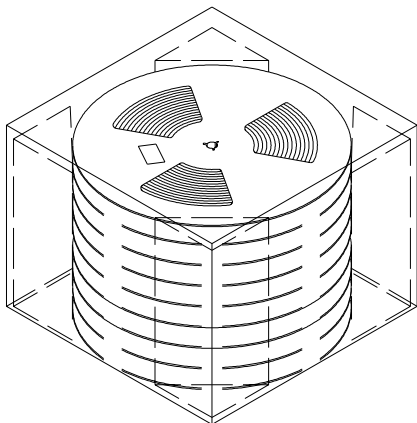


**N.W.:** 12.7 KGS  
**G.W.:** 13.7 KGS  
**Q'TY:** 9,000 PCs per carton  
(9 boxes set in order)  
**Meas.:** 51.0L x 31.0W x 21.0H CM

**A2: Carrier Tape (Meet Standard EIA-481)**



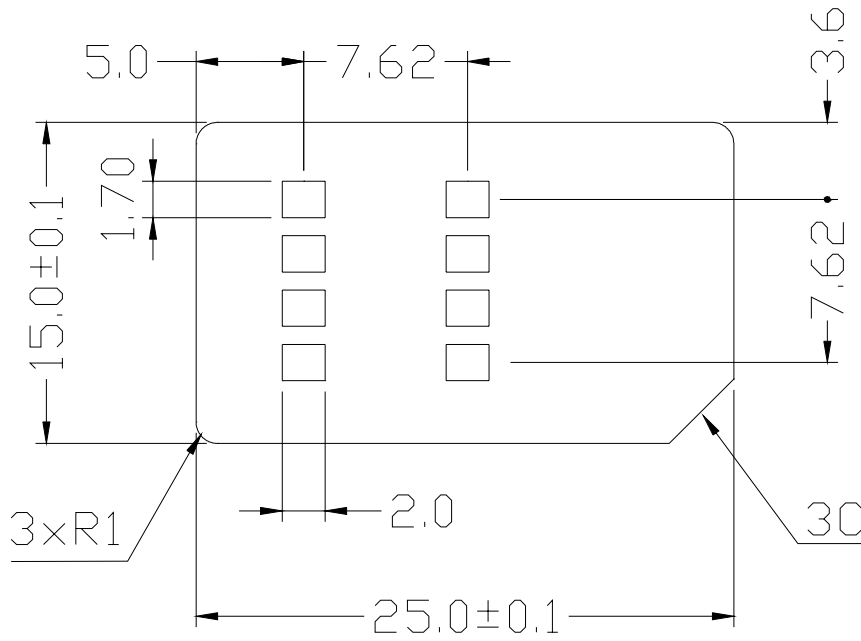
G.W.: 0.78 KGS  
Q'TY: 600 PCs per reel  
Meas.: dia. 33 CM, W 3.2 CM



N.W.: 6.5 KGS  
G.W.: 7.5 KGS  
Q'TY: 4,800 PCs per reel  
(8 reels set in order)  
Meas.: 35.0 x 35.0W x 32.5H CM

APPENDIX B: SIM CARD DIMENSION (According to Standard GSM 11.11)

Dimensions in millimeters (mm)



Thickness: 0.76 +/- 0.08 mm