PREPARED BY:	DATE		
N. KATO	MAY. 10.1995	TENTATIVE	SPEC No. G4624
N. Kato			FILE No.
			ISSUE MAY. 10.1995
CHECKED BY:	DATE	SHARP CORPORATION	PAGE 5
M. ASAI	MAY. 10.1995	282-1 HAJIKAMI, SHINJYOCHO,	REPRESENTATIVE DIVISION
M. Asai		KITAKATSURAGIGUN, NARA,	ENGINEERING DEPT.
APPROVED BY:	DATE	639-21, JAPAN	PHOTOVOLTAICS DIV.
K. NISHIDA	MAY. 10.1995		
K. Nishida			

SPECIFICATION

SPECIFICATION FOR

SOLAR CELL

MODEL No. N E 5 1 O O

1. This specification sheets include the contents under the copyright of Sharp Corporation ("Sharp"). Please keep them with reasonable care as important information. Please don't reproduce or cause anyone reproduce them without Sharp's consent.

2. Please obey the instructions mentioned below for actual use of this cell.

   (1) This cell is designed for general use solar ❑ odules.
   Main applications of the modules using these cells are as follows.
   Telemeter system, Microwave repeater station, Other telecommunication system(Terminal), Village electrification, Monument, Toy, etc.

   (2) Please take proper steps in order to maintain reliability and safety, in case this cell is used for the uses mentioned below which require high reliability.
   Unit concerning control and safety of a vehicle(air plane, train, automobile, etc.), Traffic signal, Road sign, Security system, Other safety system, etc.

   (3) Please don't use for the uses mentioned below which require extremely high reliability.
   Space equipment, Telecommunication system(Trunk), Nuclear control system, Medicalsystem(relating to any fatal element), etc.

CUSTOMER'S APPROVAL

DATE

BY

PRESENTED

BY H. Sawai

H. SAWAI

Department General Manager of Engineering Dept.

TENTATIVE

1. Applications

This specification appl es to the NE51OO solar cell.

2. Outline

Substrate	p type polycrystalline silicon
Structure	n^+ / p / p^+
Dimensions	Refer to the drawing SSE95153, SSE95154
Mass	15.5 g

3. Specifications

3.1 Dimensions

L1=126±2 mm , L2=126±2 mm

3.2 Electrical characteristics

Characteristic	Symbol	Min.	Typ.	Unit
Open circuit voltage	Voc		595	mV
Short circuit current	Isc	-	5.16	A
Maximum power	Pm	1.99	2 . 2 2	Y

Conditions:

Irradiance = 1000W/m^2
calibrated using Sharp standard cell.
Light source = Xenon short arc amp with AM1.5 Filter
Cell temperature = 25℃

3.3 Absolute maximum ratings

Rating	Value	Unit
Operating temperature	-40 ~ +90	'c
Storage temperature	-40 ~ +90	"c

4. Incoming inspection

Incoming inspection for Sharp products are shown below.

4.1 Inspection

All of products shall be inspected.
Judgement criterions are as follows.
(1) Dimensions L1=126±2 mm , L2=126±2 mm
(2) Electrical characteristic Maximum power (rein) = 1.99 W
under the conditions of item 3.2

4.2 Disposal of rejected products

Object products judged as rejected products due to Sharp's responsibility in the incoming inspection by user ❑ ay be ab e to be return to Sharp.

5. Packing

25 pcs. of products shall be put into a packing case as shown in SSE95155.

6. Notes

6.1 Handling

Avoid the handlings mentioned below, because it causes degradation of electrical or soldering performance.

"Handling with bare hands.

-Contact with corrosive chemicals or gases.

● Scrubbing the products surface. etc

So handle products carefully with plastic tweezers.

Avoid twisting, dropping or picking the products and so on, because it causes breakage or crack.

6.2 Connecting

When this products are connected in series or parallel and exposed to sunlight, they produce high voltage and current. In such case, never touch the output wires with bare hands not to receive an electric shock.

Long time heating causes an electrode damage, so please make short the soldering time as far as possible.

《 Recommendable soldering conditions 》

Soldering heat time	1~2 s
Soldering iron temperature :	approximately 300℃.
Flux(if necessary)	non-corrosive mildly activated flux (Remove flux completely after soldering with alcohol and acetone.)

Never assemble this products with other kinds of solar cells, because it may cause the hot-spot problem.

6.3 Storage

Keep away products from corrosive chemicals or gases and keep them in a strage box filled up with pure nitrogen gas or clean dry air at 10N3OT.

6.4 Humidity resistance

This products have no humidity resistance.

So cover the products with glass, wetproof films and resin to perform a long term reliability.

6.5 COCOM

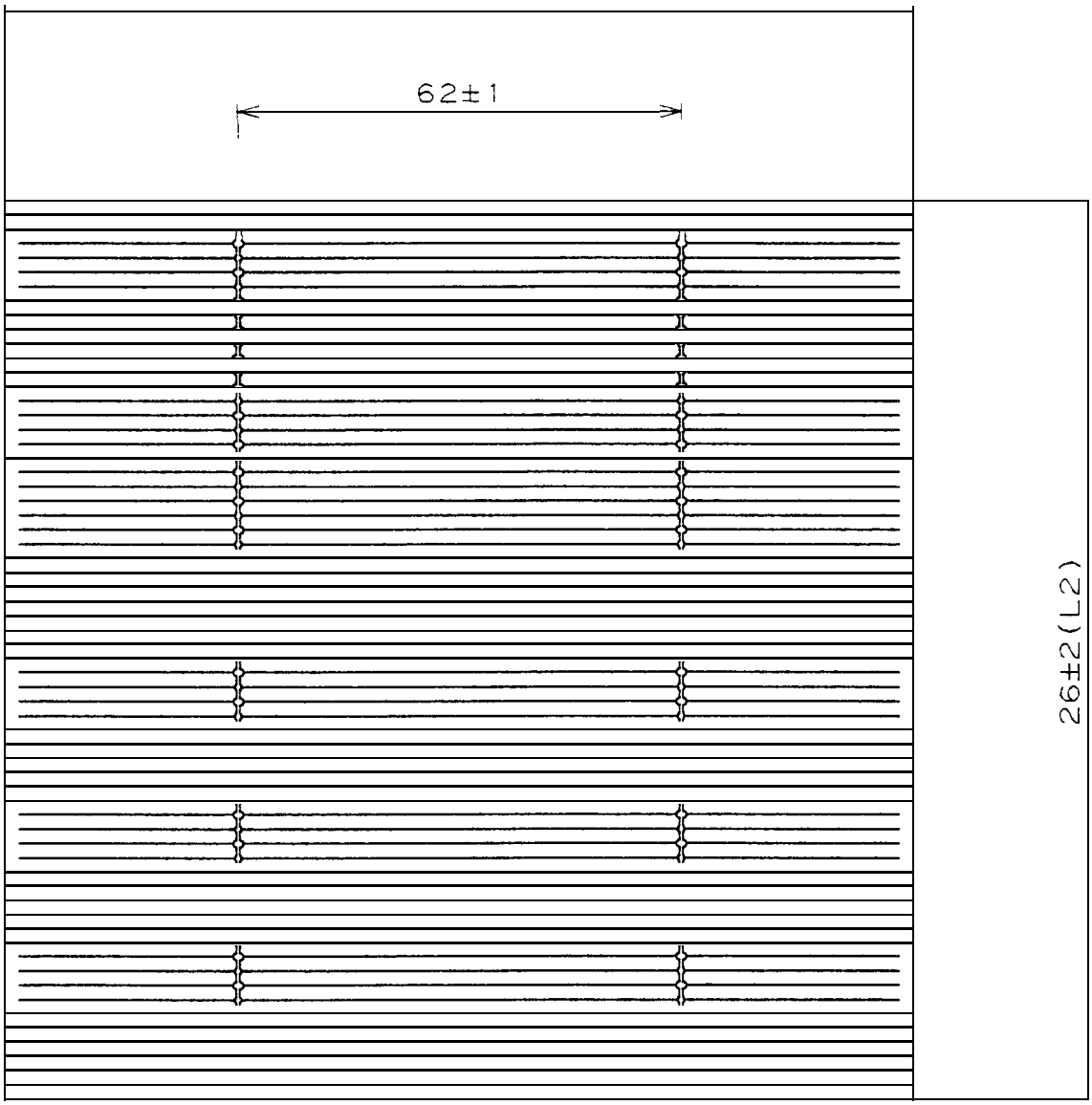
This product is neither designed as radiation resistance nor for space use.

7. Other

Any doubt provided in the above or any troubles on testing shall be determined in good faith upon mutual consultation of the both parties , however , in case of no consultation , the settlement shall be depend upon Sharp's judgement.

SHARP

TENTATIVE



N CONTACT
(SOLDER COATED)

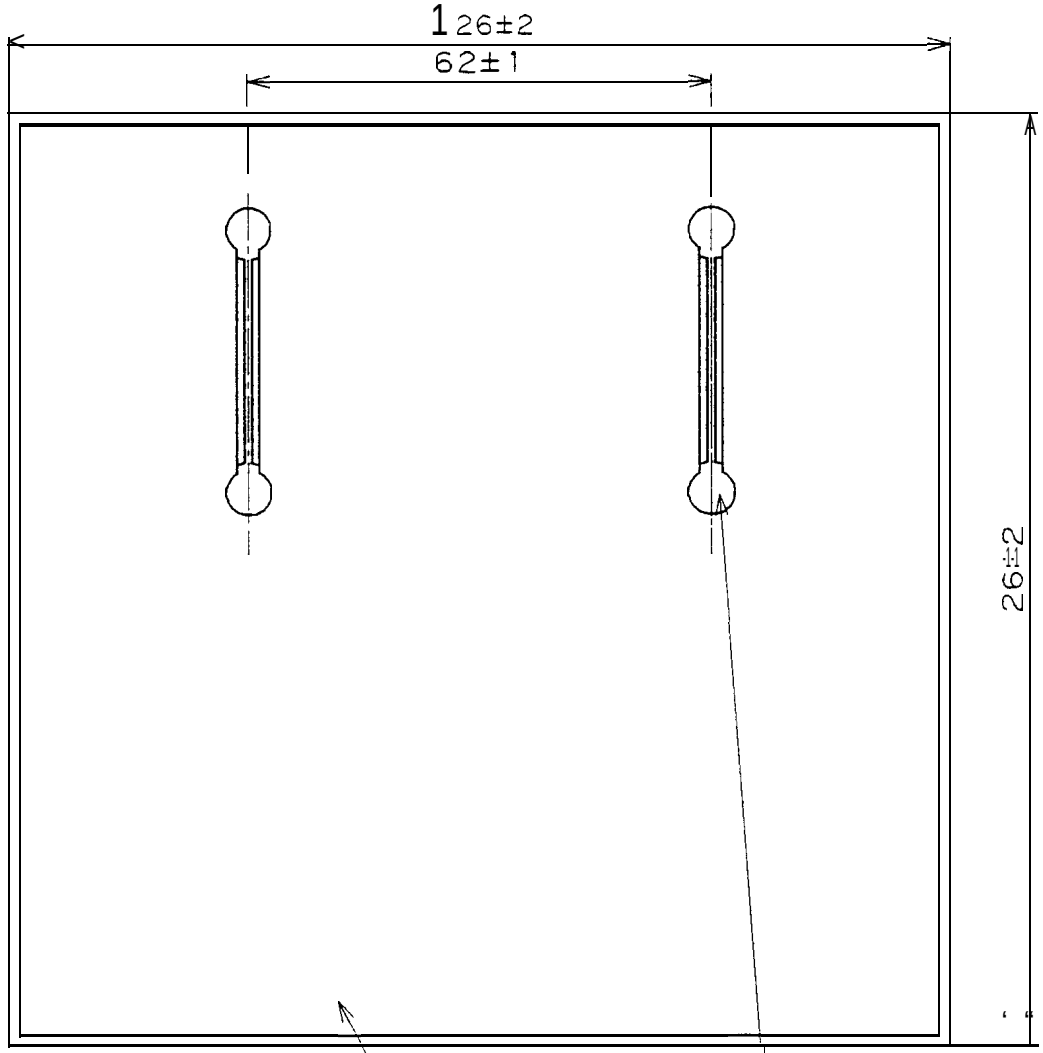
If necessary, contact shaPe will be modl fled without prior notice for performance Improvement.
(Mod lfication not Interfere with assembly.)

適用機種 APPLICABLE MODEL		尺度 SCALE	単位 UNIT	2			
		1/1	mm	1			
				改訂日 DATE	改訂記事 REVISE	担当 CHARG	
板厚 THICKNESS	員数 PIECES	材質 MATERIAL	仕上 FINISH	名称 NAME	Front View		
日付 DATE	MAY.10.1995			コード CODE			
設計 DESIGN	製図 DRAW	写図 TRACE	検図 CHECK	承認 APPROVE	シャープ株式会社 電子部品事業本部		
Isoi	Asai		K.Nishida		PHOTOVOLTAICS DIVISION	図番 DRAWING No.	SSE95153
					SHARP CORPORATION		

G4624

SHARP

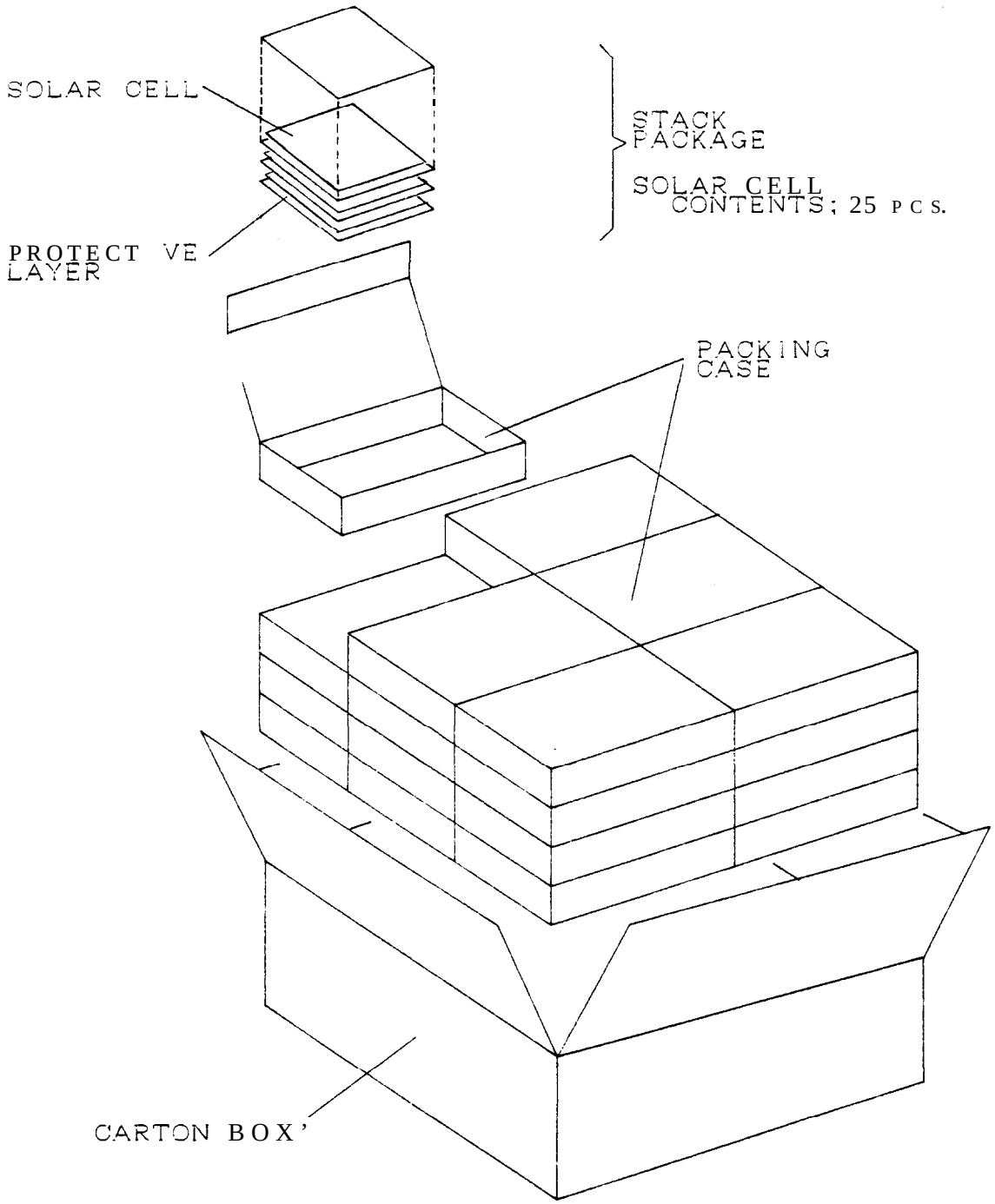
TENTATIVE



If necessary, contact shape will be modified without prior notice for performance Improvement.
(Modification not Interfere with assembly.)

適用機種 APPLICABLE MOOEL		尺度 SCALE	単位 UNIT	⚠2			
		1 / 1	mm	⚠1			
				改訂日 DATE	改訂記事 REVISE	担当 CHARGE	
板厚 THICKNESS	員数 PIECES	材質 MATERIAL	仕上 FINISH	名称 NAME	Rear View		
日付 DATE	MAY. 1O.1995			コード COOE	II III II II I I I I		
設計 DESIGN	図 DRAW	TRACE	承認 CHECK APPROVE	シャープ株式会社 電子部品事業本部			
Asai	Asai		K.Nishida	PHOTOVOLTAICS DIVISION			
				SHARP CORPORATION	図番 DRAWING NO.	SISIE9511151411	

THIS DRAWING WILL BE SUBJECT TO MODIFICATION
WITHOUT PRIOR NOTICE FOR PERFORMANCE IMPROVEMENT.



適用機種 APPLICABLE MODEL		尺度 SCALE	単位 UNIT	2 .			
				1 .			
				改訂 DATE	改訂記事 REVISE		担当 CHARGE
板厚 THICKNESS	員数 PIECES	材質 MATERIAL	仕上げ FINISH	名称 NAME	PACKAGE CASE OUTLINE		
日付 DATE	MAY. 10 '95			コード CODE			
設計 DESIGN	製図 DRAW	写図 TRACE	検図 CHECK	承認 APPROVE	シャープ株式会社 電子部品事業本部		
m.Mori	m.Mori		K.Nishida		太陽電池事業部 技術部		
					SHARP CORPORATION	図番 DRAWING No	SSE951502