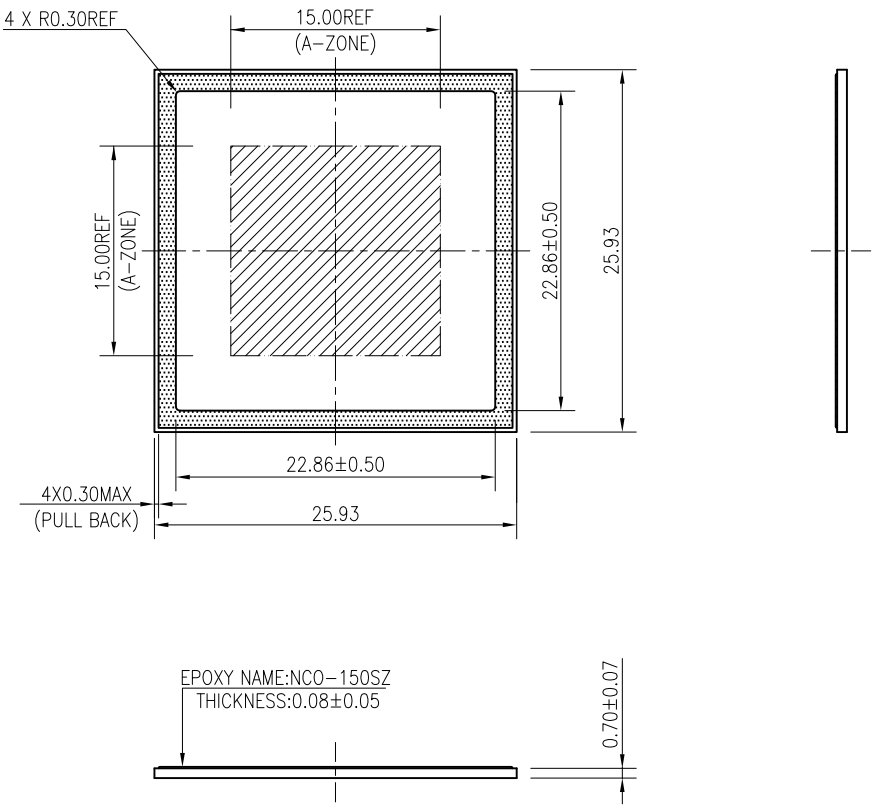
SSM P/N GLX02002

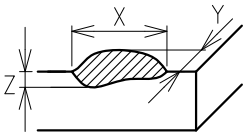


NOTE

1.DUST : φ20μmMAX(A-ZONE)
(DUST AND CONTAMINATION SHALL BE ACCEPTABLE IF REMOVABLE WITH AIR BLOW AT 294kPa OR STICKY GLUE.
AND NOT BEING THE STAIN/DIRT TO GIVE A SPECTRUM CHARACTERISTIC BAD INFLUENCE.)

2. SCRATCH : WIDTH20μmMAX、LENGTH2.0mmMAX(A-ZONE)

3. CHIPS
X?1.50mm
Y?0.50mm
Z?0.35mm



4. SPEC : KSD-248-0091 (LATEST Rev.)

5. EPOXY TECHNICAL SHEET : KSD-248-0105 (LATEST Rev.)

MODIFICATIONS									
–	INITIAL								
REV	CHANGE	DATE	APPROVED	CHECKED	CHECKED	CHECKED	CHECKED	DRAWN	

NAME	TOLERANCES	SCALE	MATERIAL	
25.93SQ x 0.70 GLASS LID(ID=22.86SQ)	± 0.10	2 : 1	D263Teco	1/1
DRAWING NO. KO-LI0111855		UNIT mm	KYOCERA	

CAUTION

No.	KSD-248-0105-5

KYOCERA CORPORATION KOKUBU PLANT
COMMUNICATION COMPONENTS DIVISION

TECHNICAL SHEET
Data Reference

SEALANT	NCO - 150SZ

1	Physical Property

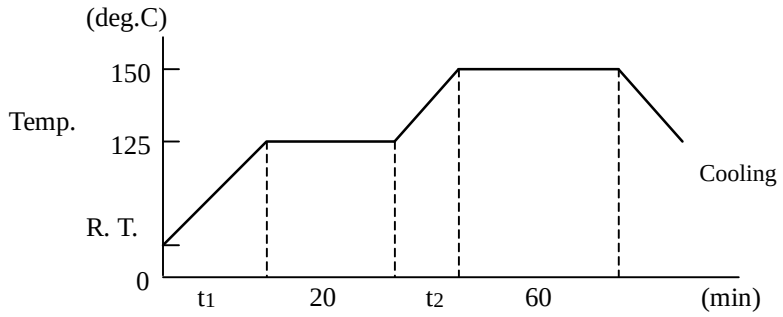
Item	Unit	Data
Color	-	White
Specific Gravity	-	1.8
Shear Strength(NOTE.1)	MPa	30.40
Coefficient of Thermal Expansion	1/deg.C x 10E-5	7
Glass Transition Point	Deg.C	160
Water Absorption	%	0.75 MAX
Dielectric Constant	Epsilon(MHz)	6.90
Loss Factor	Tan delta(1MHz)	0.045
Thermal Conductivity	W/m*K	0.47
Surface Resistivity	Ohm	3.5 x 10E14
Note	(NOTE.1)Curing Sample = Ceramic / Ceramic	

2	Reliability (Judgement =Gloss Leak Test)

Test Item	MIL-STD 883E	Condition	Judge(pcs)
Temperature Cycle	1010-COND C	-65/150deg.C (40Cycles)	0/100
Thermal Shock	1011-COND A	0/100deg.C (40Cycles)	0/100
Impact Resistance	2002-COND B	14700m/s^2, 0.5ms, 5Times	0/100
High Temp Storage	1008-COND C	150deg.C/1000Hr	0/100
Low Temp Storage	-	-65deg.C/1000Hr	0/100
High Temp & Humidity	-	85deg.C/85%RH, 1000Hr	0/100
Pressure Cooker	-	121deg.C, 0.21Mpa, 50Hr	0/100
Note	Ceramic Curing (18.0mm SQ=Sealing Width 1.0mm)		

NCO-150SZ

3	Curing Condition



Time t1=20-60 min

t2=10-60 min

*Temp. is at CAP Surface (=Epoxy resin).

Recommendable Loading : 98 K

*Please reconfirm the sealing completely done at pilot test.

4	Shelf Life(under the packing sealed conditions)			
Temperature	0-5deg.C	6-20deg.C	21-27deg.C	28-35deg.C
Humidity	Less than 60%			
Duration	18 months	12 months	6 months	3 months

Shelf life shall be counted from shipping Date.

Storage Condition:

1. Kyocera recommend to store the product under the unpacking condition at 1-5 deg C (prohibited in freezer).

2. When using of the product,Kyocera recommend baking for removal moisture out by heat Treatment at 80deg.Cx30 minutes.

3. As for the product left over one week after opening,Kyocera recommend to store it at room temperature and humidity of 10% Max.

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May.16,2001

GLASS MATERIAL DATA

■ *Technical Data of Optical Glass(D263,CG-1)*

*Reference Data

● Mechanical properties,Thermal properties,Electrical properties

Code name				D263	CG-1
Material				Borosilicate glass	Borosilicate glass
Item		Unit	Note		
Mechanical properties	Density	g/cm^3		2.51	2.44
	Young's modulus	kN/mm^2		72.9	71.1
	Modulus of rigidity	kN/mm^2		30.1	29.2
	Poisson's ratio	-		0.21	0.22
	Knoop hardness	kN/mm^2		5.78	5.29
Thermal properties	Thermal expansion	$x10^{-7}$/deg.C		72	67
			Measured temp(deg.C)	20/300	30/300
	Specific heat	J/(g*deg.C)		-	0.745/1.047
			Measured temp(deg.C)	-	20/200
	Thermal conductivity	W/(m*deg.C)		-	1.13/1.34
			Measured temp(deg.C)	-	20/200
	Transformation point	deg.C		557	540
	Sag point	deg.C		-	600
	Strain point	deg.C	$10^{14.5}$poise	529	500
	Annealing point	deg.C	10^{13}poise	557	515
	Softening point	deg.C	$10^{7.6}$poise	736	730
Electrical properties	Volume resistivity	Ω*cm		$1.6x10^8/3.5x10^6$	$6.22x10^{14}/3.02x10^{11}/4.33x10^8$
			Measured condition	A.C.50Hz,250deg.C/A.C.50Hz,350deg.C	20deg.C,500V/100deg.C,500V/200deg.C,500V
	Dielectric constant	-		6.7	5.14/5.29/5.63
			Measured condition	1MHz	20deg.C,1MHz/100deg.C,1MHz/200deg.C,1MHz
	Dielectric loss factor	-	tanδ	$61x10^{-4}$	$5.0x10^{-3}/5.9x10^{-3}/3.1x10^{-2}$
			Measured condition	1MHz	20deg.C,1MHz/100deg.C,1MHz/200deg.C,1MHz

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May.16,2001

GLASS MATERIAL DATA

■ *Technical Data of Optical Glass(D263,CG-1)*

*Reference Data

● Optical properties,Others

Code name				D263	CG-1
Material				Borosilicate glass	Borosilicate glass
Item		Unit	Note		
Optical properties	Refractive indices	-	$n_F(\lambda=486.1nm)$	1.5300	-
		-	$n_e(\lambda=546.1nm)$	1.5255	-
		-	$n_d(\lambda=587.6nm)$	1.5231	1.5060
		-	$n_D(\lambda=589.3nm)$	1.5230	-
		-	$n_C(\lambda=656.3nm)$	1.5204	-
	Abbe value	-	$\nu_e=(n_e-1)(n_F-n_C)$	55	-
		-	$\nu_d=(n_d-1)(n_F-n_C)$	-	63
		-	$\nu_D=(n_D-1)(n_F-n_C)$	-	-
	Spectral transmittance	%	200nm	0	0
		%	300nm	0	90.3
		%	400nm	91.2	91.8
		%	500nm	91.7	92.0
		%	600nm	91.9	92.2
		%	700nm	92.0	92.4
		%	800nm	92.0	92.3
		%	900nm	92.0	92.2
		%	1000nm	92.3	92.5
		%	1100nm	92.5	92.7
		mm	Measured glass thickness	0.55	0.9
Others	Glass thickness	mm		0.5/1.0	0.5/2.0

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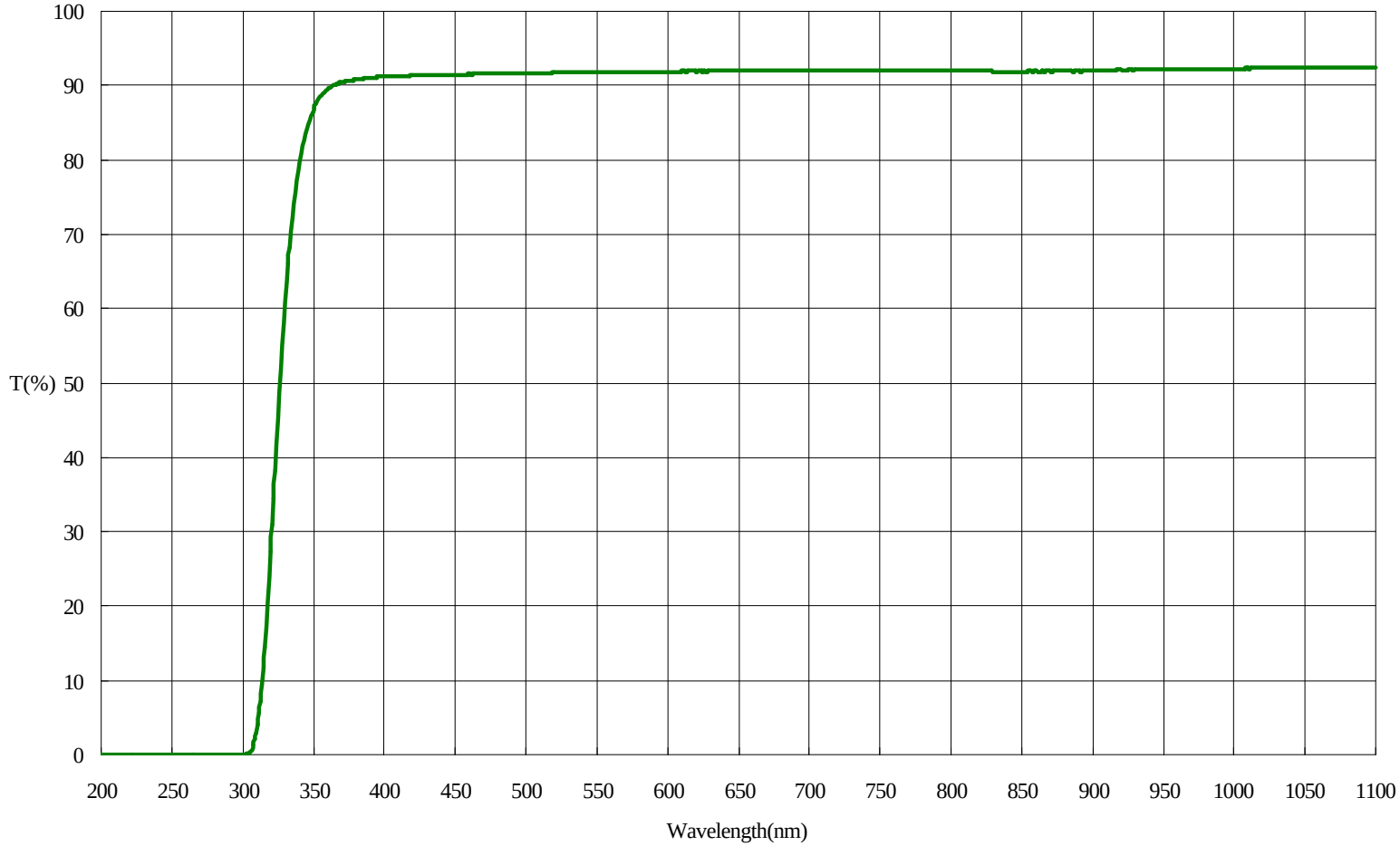
GLASS MATERIAL DATA

■ ***Technical Data of Optical Glass(D263)***

*Reference Data (t=0.55)

● Transmittance



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GLASS MATERIAL DATA

■ ***Technical Data of Optical Glass(CG-1)***

*Reference Data (t=0.9)

● Transmittance