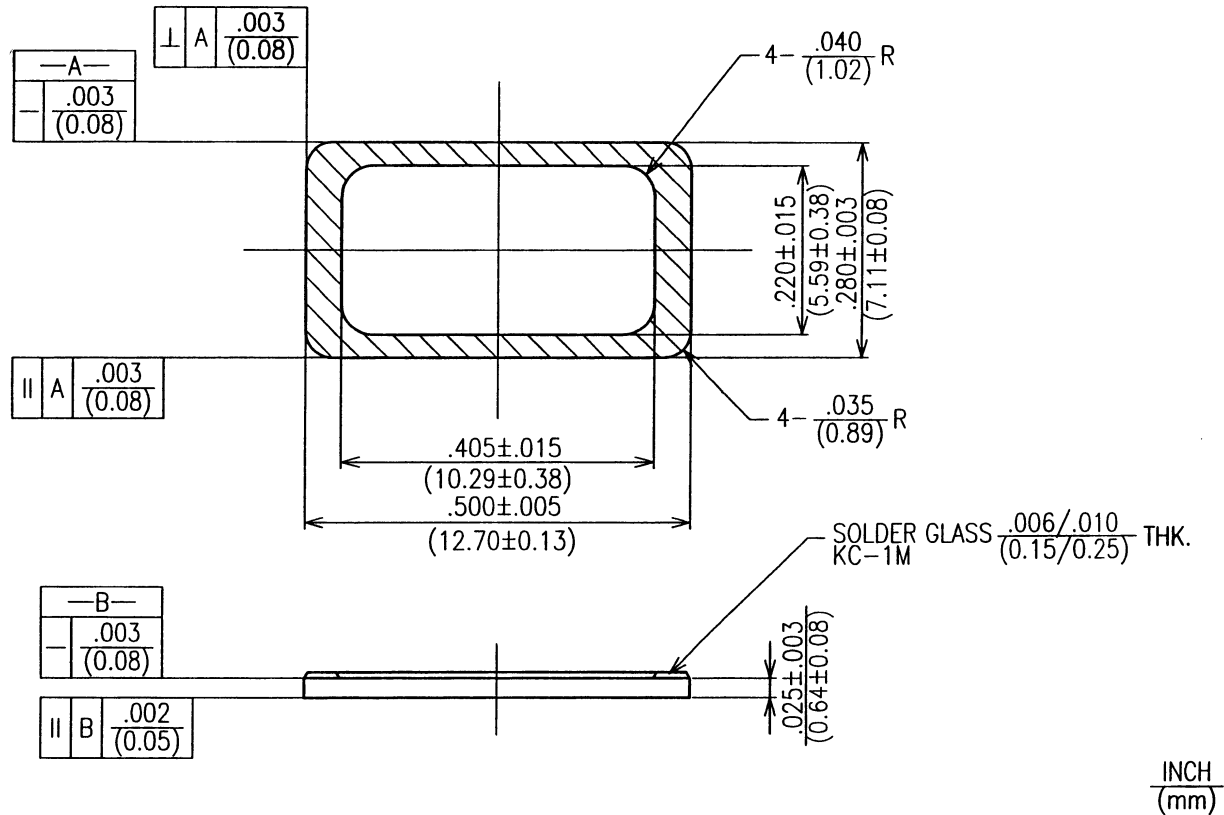


SSM P/N CR502807



INCH
(mm)

MODIFICATIONS	NAME		TOLERANCES	DRAWN	CHECKED
	280X500 LID T25			UNLESS OTHERWISE SPECIFIED	
	SCALE	MATERIAL	K.Ohtsuka	K.Wakamatsu	
		BLACK ALUMINA	APPROVED	DATE	
				23 APR.2003	
	KYOCERA CORPORATION	KYOTO JAPAN	DWG.No	KCC-11751	



1. CHARACTERISTICS

Transition Point (°C)	305
Deformation Point (°C)	335
Softening Point (°C)	400
Thermal Expansion Coefficient	
40-250°C ($\times 10^{-6}/^{\circ}\text{C}$)	6.10
Specific Gravity (g/cc)	6.9
Dielectric Constant 1 MHz, 25°C	35.0
Volume Resistivity	
$\log_{10} (\Omega \text{ -cm})$ at 250°C	9.5
at 300°C	7.8
Dielectric Loss Tangent	
1 MHz, 25°C	0.013
Acid Durability (mg/cm ²)	
1N HCL 25°C 5 min.	0.7
18N H ₂ SO ₄ 50°C, 5 min.	0.2
Thermal Conductivity	
25°C (Cal/cm. sec. °C)	0.0034
Alpha/Emission	
($\alpha/\text{cm}^2/\text{hr.}$)	24

2. RECOMMENDED PRE-CLEANING

Steps	Solution	Temp.	Period
a. De-scaling	50% H ₂ SO ₄	95°C	1 min.
b. Acid washing	10% H ₂ SO ₄	25°C	5 sec.
c. Acid washing	H ₂ SO ₄ :HNO ₃ :H ₂ O 2 : 1 : 1 By Vol.	25°C	5 sec.
d. Tap Water Rinse		25°C	2 min. min.
e. Distilled Water Rinse		25°C	2 min. min.
f. Tin plating			

3. RECOMMENDED TIN PLATING CONDITION

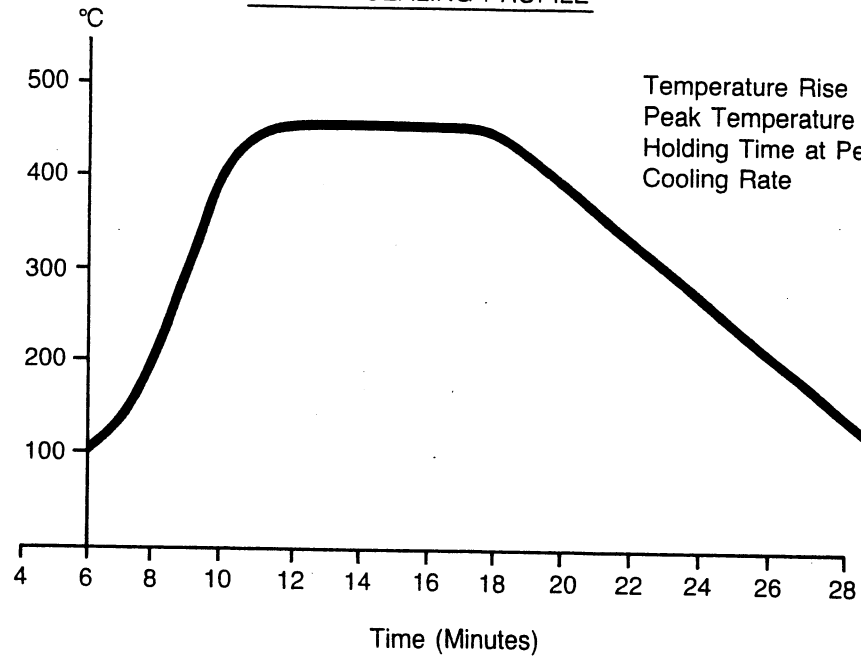
- 3.1 Plating Solution
- Sulphuric Acid Bath

105 cc/liter	H ₂ SO ₄
30 gram/liter	SnSO ₄
40 cc/liter	Tinglo Culmo Starter Conc.
 - Temperature of Plating Bath 17-21°C
- 3.2 Current Density — 1.4-2.5 Ampere/SQ DM (Square Decimeter)
- 3.3 Plating Time 10 Minutes Max.



KC-1M DATA SHEET

TYPICAL SEALING PROFILE



Temperature Rise
Peak Temperature
Holding Time at Peak
Cooling Rate

70-110°C/Min
450-465°C
6-8 minutes
30-50°C/min.