SURECERA

Capacitor Dielectrics

SC-X8R222L

用途 Application：

PME-MLCC 介质瓷粉

Dielectric Powders for PME-MLCC

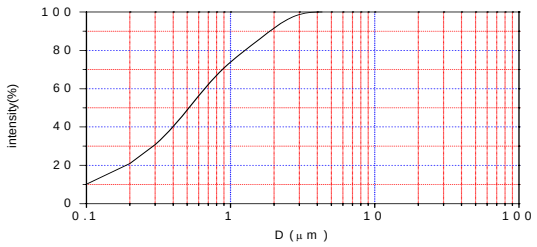
瓷料特性 Features：

- 材料体系：$BaTiO_3$
  Material System: $BaTiO_3$
- 瓷料符合 EIA X8R 特性
  Meets EIA X8R specification
- 空气中烧结，烧结温度 1100ºC
  Sinter in air. Sintering temperature is 1100ºC
- 介电常数：K=2200±100
  Dielectric constant: K=2200±100
- 分散性好
  Good dispersion
- 环保型瓷料，符合欧盟 RoHS 指令
  Environment friendly, RoHS compliant

物理特性 Typical Physical Properties

Density (g/cm^3)		≧3.6
Surface Area (m^2/g)		1.6~2.8
Particle Size (μm)	D_{10}	0.19
	D_{50}	0.51
	D_{90}	1.90
Moisture Content (120ºC/5min)		≦0.3%
L.O.I (1100ºC/1hr)		<0.2%

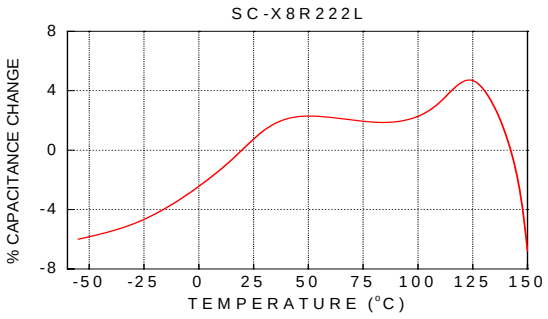
粉体 PSD 曲线 Powders PSD curve



MLCC 电性能 Electrical Properties of MLCC

K (1KHz, 1V, 25ºC)	2100~2300
DF (1KHz, 1V, 25ºC)	<1.8%
IR (25ºC, 100V_{DC})	>5×10^{10} Ω
TCC up to 150ºC	±15% Δ C Max
BDV (25ºC)	>900V/mil

TCC 曲线 Typical Temperature Coefficient



* Chip Size 0805. Layers 20. Thickness 20 μm

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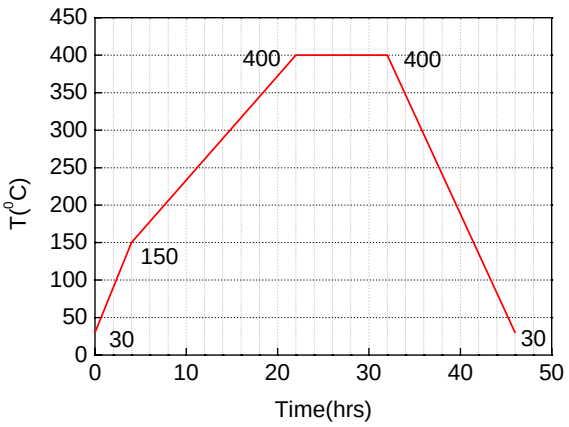
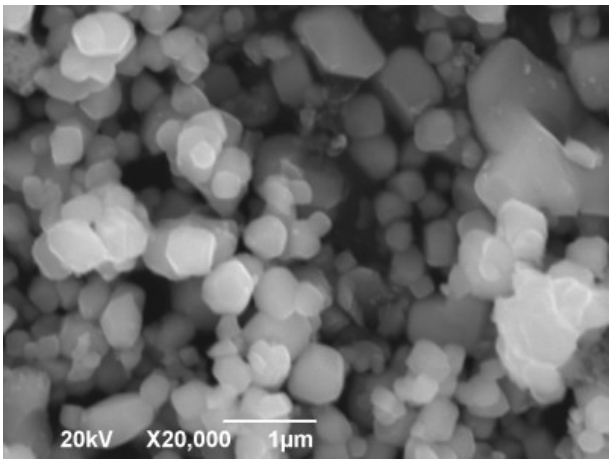
排胶曲线
Binder Burn-Out Curve

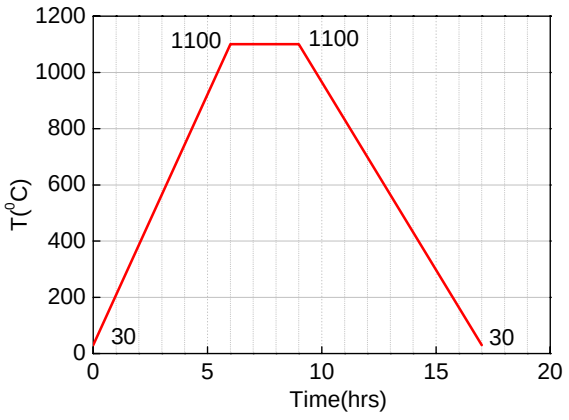


*PVB 粘合剂系统(PVB binder System)
*本曲线仅供参考(This curve is for reference only)

粉体 SEM 图
Powders SEM



烧结曲线
Sintering Curve



*本曲线仅供参考(This curve is for reference only)

MLCC 断面 SEM 图
MLCC Fracture Surface SEM