



ST215 导热 CEM-3

ST215 High Thermal CEM-3

特点

- 优异的热导性能，热导率 $\geq 1.5\text{W/m}\cdot\text{K}$
- CTI $\geq 600\text{V}$
- 优异的耐热性能，T288 大于 60min
- 无卤阻燃
- Tg (DSC, $^{\circ}\text{C}$) ≥ 150

FEATURES

- Excellent Thermal Conductivity $\geq 1.5\text{W/m}\cdot\text{K}$
- CTI $\geq 600\text{V}$
- Excellent Thermal Resistance, T288 $\geq 60\text{min}$
- Halogen-Free
- Tg(DSC, $^{\circ}\text{C}$) ≥ 150

应用领域

- 大功率 LED 照明
- 电源板
- 汽车电子

APPLICATIONS

- High Power LED Illumination
- Power Supply Board
- Automotive Electronics

GENERAL PROPERTIES

Item		Test Condition	Unit	Spec.	Typical Value
Volume Resistivity		C-96/35/90	M Ω . cm	$\geq 10^6$	5.1×10^8
		E-24/125		$\geq 10^3$	6.5×10^5
Surface Resistivity		C-96/35/90	M Ω	$\geq 10^4$	2.5×10^5
		E-24/125		$\geq 10^3$	6.2×10^8
Dielectric Breakdown		D-48/50+D-0.5/23	kV	≥ 40	40+Kv NB
Permittivity at 1MHz		C-24/23/50	---	---	6.0
Loss Tangent at 1MHz		C-24/23/50	---	≤ 0.035	0.007
Arc Resistance		D-48/50+D-0.5/23	s	≥ 60	245
Peel Strength		288 $^{\circ}\text{C}$, 20s	N/mm	≥ 1.0	1.3
		125 $^{\circ}\text{C}$		≥ 0.7	0.95
		At process solutions		≥ 0.8	1.05
Flexural Strength	Lengthwise	A	MPa	≥ 250	290
	Crosswise			≥ 150	190
Flammability		C-48/23/50	---	V-0	V-0
		E-24/125	---	V-0	V-0
Water Absorption		E-1/105+D-24/23	%	≤ 0.5	0.13
Thermal Stress	Etched	288 $^{\circ}\text{C}$	s	10s No delamination	> 90
	Unetched				> 60
CTI		A	Grade	PLC 0	PLC 0
Tg(DSC)		A	$^{\circ}\text{C}$	≥ 150	155
T-288		TMA	min	≥ 5	> 60
Td(5%loss)		TGA 10 $^{\circ}\text{C}/\text{min}$, N ₂	$^{\circ}\text{C}$	≥ 310	400
Thermal Conductivity		A	W/m \cdot K	---	1.51
Z-CTE		Before Tg	ppm/ $^{\circ}\text{C}$	---	30
		After Tg			180
		30 $^{\circ}\text{C}$ to 260 $^{\circ}\text{C}$	%		2.35

Remarks: 1. Specification sheet: IPC-4101C/14 is for your reference only.

2. All the typical value is based on the 1.6 mm specimen, while the Tg is for specimen $\geq 0.5\text{mm}$.

3. All the typical value listed above is for your reference only, please turn to Shengyi Technology Co., Ltd. for detailed information, and all rights from this data sheet are reserved Shengyi Technology Co., Ltd.

Explanations: C=Humidity conditioning D= Immersion conditioning in distilled water E= Temperature conditioning

The figures following the letter symbols indicate with the first digit the duration of the preconditioning in hours, with the second digit the preconditioning in $^{\circ}\text{C}$ and with the third digit the relative humidity.