



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 > 60min
- Halogen-Free
- Tg(DSC, $^{\circ}\text{C}$) ≥ 150

GENERAL PROPERTIES

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

Item		Test Condition	Unit	Spec.	Typical Value
Volume Resistivity		C-96/35/90	M Ω ·cm	$\geq 10^6$	5.13E+08
		E-24/125		$\geq 10^3$	6.54E+05
Surface Resistivity		C-96/35/90	M Ω	$\geq 10^4$	2.54E+05
		E-24/125		$\geq 10^3$	6.22E+08
Dielectric Breakdown		D-48/50+D-0.5/23	kV	≥ 40	44+Kv NB
Permittivity at 1MHz		C-24/23/50	---	---	6.00
Loss Tangent at 1MHz		C-24/23/50	---	≤ 0.035	0.007
Arc Resistance		D-48/50+D-0.5/23	s	≥ 60	244
Peel Strength		After thermal stress	N/mm	≥ 0.90	1.39
		At 125 $^{\circ}\text{C}$		≥ 0.70	1.22
		After Chemical Solution		≥ 0.80	1.23
Flexural Strength	Lengthwise	A	N/mm ²	≥ 276	290
	Crosswise			≥ 186	189
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
Warpage		A	%	≤ 1.0	0.20
Thermal Stress	Etched	288 $^{\circ}\text{C}$	s	No delamination	> 90
	Unetched			No delamination	> 60
CTI		A	V	---	≥ 600
Tg(DSC)		A	$^{\circ}\text{C}$	≥ 150	155
T-288		TMA	min	≥ 30	> 60
T-300		TMA	min	---	> 30
Td(5%loss)		TGA 10 $^{\circ}\text{C}/\text{min}$, N ₂	$^{\circ}\text{C}$	≥ 330	405.4
Thermal Conductivity		A	W/m·K	---	1.51
Z-CTE		Before Tg	ppm/ $^{\circ}\text{C}$	≤ 60	27.21
		After Tg		≤ 300	178.1
		30 $^{\circ}\text{C}$ to 260 $^{\circ}\text{C}$	%	≤ 4.0	2.35

Remarks: 1.Specification sheet: IPC-4101D/35 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.