

NANO CERAMIC RADIATION PAINT NRP-6000

Feature

CTP-6000 is a kind of cream-like coating. It contains high thermal dissipation nano-ceramic pellets. The standard color is white. The standard is concentrated and need to be diluted with solvent when processing.

Advantage and Characteristics

- Contains high thermal diffusion, convection, and radiation ceramic pellets.
- Can stick firmly onto the components
- Water-proof and able to endure high temperature

The excellent ability of thermal conduction of metal spreads the heat and takes it to the ceramic layer. The ceramic pellets on the surface of the material can increase the surface area and thus enhancing thermal convection and thermal radiation.

Test Result

Apparatus :

- Power Supply GPC-3030DQ
- Thermometer TM-947SD
- Test mold 35x120 mm

Temperature : 26°C (±0.5°C)

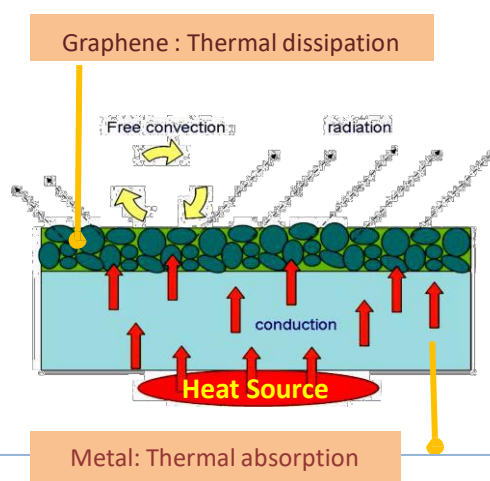
Test Area :

Cu(none)- 40 x 120 mm

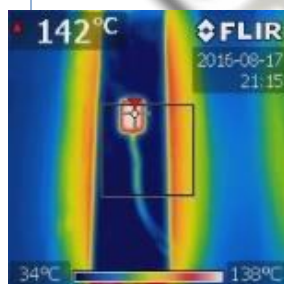
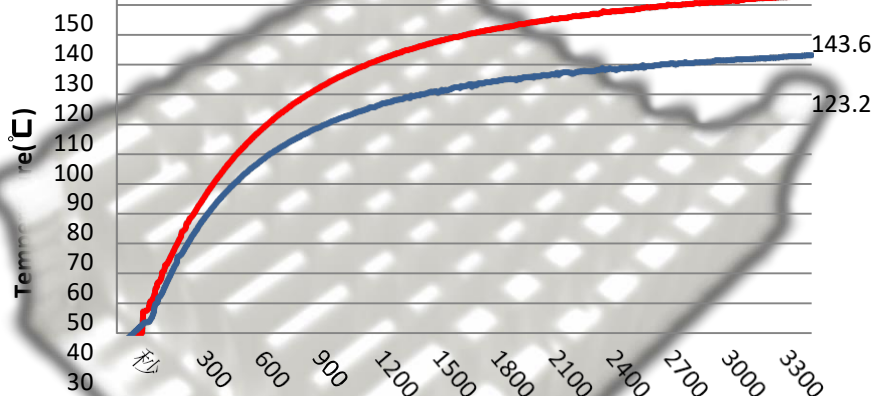
Cu(NRP-6000) 40 x 120 mm

Input Power : 30W Times :
>3900 (sec.)

Application



30W Temperature Curve



1ozCu

1ozCu+NRP6000



NANO CERAMIC RADIATION PAINT NRP-6000

Specification

Properties of NRP-6000		
Item	Specifications	Test Method
color	white	Visually
Specific gravity @ 20°C	2.5	g/cc
Particle size	<0.5	um
pH @ 20°C	10.5 ~ 11.5	---
Viscosity @20°C	3.0 ~ < 5	cPs
Curing time (half-cured)	10mins	-
After mixing usable time	>4hr	-
Shelf life(25°C , 70%wt.)	180 Day	-
Solvent	EAC 、 MEK	-
Pencil hardness	≥6H	ASTM D3363
Adhesion strength	B4	ASTM D3359-B
Aging & UV resistant	PASS	ASTM G53
		ASTM D656
Boiling water resistant (3hr)	PASS	AAMA 2605
Heat resistant(150°C , 2hrs)	PASS	ASTM G26
Salt water resistance(5%NaCl , 120hrs)	PASS	AAMA 2605
Water resistance (deionized water, 120hrs)	PASS	ASTM D2247
Alkali resistance (5%Na ₂ CO ₃ , 168hrs)	PASS	AAMA 2605
Acid resistance (3%H ₂ SO ₄ , 168hrs)	PASS	AAMA 2605
Oil & solvent resistant(120hrs)	PASS	AAMA 2605
Salt spray test(5%NaCl , 120hrs)	PASS	ASTM B117
Moisture resistance(50 °C , 95%RH , 100hrs)	PASS	AAMA 2605
Scratch resistant(10000 次)Scratch resistant	PASS	ASTM D968
Anti-fungal	0	ASTM G-21
heavy metal elements	PASS	EN 71 Part 3
ROHS Compliant	Pass	SGS