DUPONT™ 5463

PLATABLE TERMINATION FOR CHIP RESISTOR APPLICATIONS

PRODUCT DESCRIPTION

Specially developed for chip resistors applications, DuPont ™ 5463 is a platable lead-free*, cadmium-free* pure silver C1 termination that meets the needs for a green, high performance and low cost application.

PRODUCT BENEFITS

- Lead free* and cadmium free*
- Cost effective without containing palladium
- High yield at large volume manufacturing
- Compatible with 00X1Z(00X0) and 0FxxA resistor series
- Excellent TCR control on small chip sizes
- High acid resistance and platable
- Excellent solder leach resistance with lead-free solder

*Lead and Cadmium 'free' as used herein means that lead and cadmium is not intentionally added to the referenced product. Trace amounts however may be present.

PROCESSING

Substrates

Properties are based on tests using 96% alumina substrates. Substrates of other compositions and from various manufacturers may result in variation in performance properties.

Printing

Properties are based on 5463 printed to 13±2µm dried thickness using 325 mesh stainless steel screen with an emulsion thickness of approximately 10µm.

Drying

Allow wet prints to level for 5-10 minutes at room temperature. Dry 10-15 minutes at 150°C.

Firing

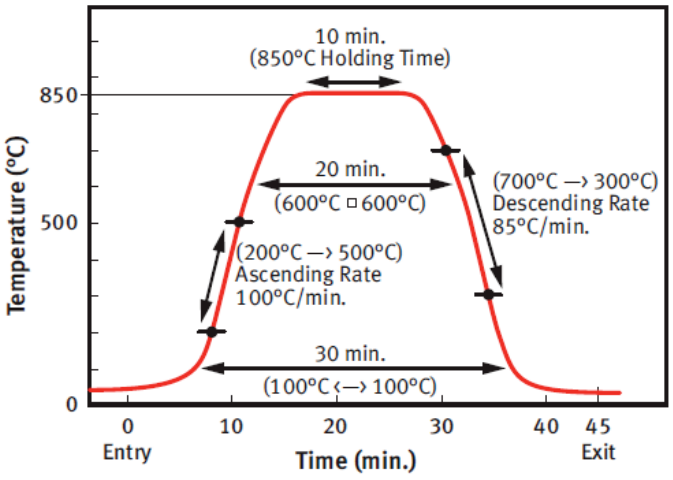
Dried prints should be fired in a belt furnace. Use a 30-minutes cycle with a peak temperature of 850°C x 10 minutes.

Typical Fired Properties

Test	Properties
F.O.G – 4th scratch	≤20µm
F.O.G – 50% point	≤10µm
Viscosity (Pa.s) [Brookfield HBT, #14 spindle, UC&S @10rpm, 25°C]	250 – 320
Solids (750°C) [%]	72 – 74
Resistivity @ 10µm (mΩ/sq)	≤8
Thinner	4553

This table shows anticipated typical physical properties for DuPont™ 5463 based on specific controlled experiments in our labs and are not intended to represent the product specifications, details of which are available upon request..

DuPont Standard Profile 850°C x 10 min., 30 min.) (DuPont QA Profile)



STORAGE AND SHELF LIFE

Containers should be stored, tightly sealed, in a clean, stable environment at room temperature (<25°C). Shelf life of material in unopened containers is six months from date of shipment. Some settling of solids may occur and compositions should be thoroughly mixed prior to use.

DUPONT™ 5463
PLATABLE TERMINATION FOR CHIP RESISTOR APPLICATIONS

SAFETY AND HANDLING

For Safety and Handling information pertaining to this product, read the Safety Data Sheet (SDS).

FOR MORE INFORMATION ON DUPONT™ 5463 OR OTHER DUPONT PRODUCTS, PLEASE CONTACT YOUR LOCAL REPRESENTATIVE:

Americas

E.I. DuPont
Chestnut Run Plaza, B708
974 Centre Rd, Wilmington, DE 19805
U.S.A
Tel. +1919 248 5188

Europe, Middle East & Africa

DuPont (U.K.) Ltd
Bristol & Bath Science Park
Dirac Crescent, Emersons Green
Bristol, BS16 7FR
U.K.
Tel. +44 117 9709667

Asia

DuPont Electronic Materials K.K.
KSP R&D B213, 2-1
Sakado 3-chome, Takatsu-ku,
Kawasaki-shi, Kanagawa, 213-0012
Japan
Tel +81 44 820 7575

DuPont Taiwan Ltd
45, Hsing-Pont Road
Taoyuan, 330
Taiwan
Tel. + 886 3 377 3616

DuPont China Holding Co. Ltd
B11, 399 Keyuan Road
Zhangjiang Hi-Tech Park
Pudong New District,
Shanghai 201203
China
Tel. +86 21 3862 2888

DuPont Korea Inc.
3-5th Floor, Asia tower #726,
Yeoksam-dong, Gangnam-gu
Seoul 135-719,
Korea
Tel. +82 2 2222 5275

E. I. DuPont India Private Limited
7th Floor, Tower C, DLF Cyber Greens,
Sector-25A, DLF City, Phase-III
Gurgaon 122 002 Haryana, India
Tel. +91 124 4091818

DuPont Company (Singapore) Pte Ltd
21 Biopolis Road
#06-21 Nucleos South Tower
Singapore 138567
Tel. +65 6586 3022

advancedmaterials.dupont.com

K-29545 (9/17)