



Front Silver (A568) Photovoltaic Metallization Paste

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A568 SOLAR CELL FRONT SILVER PASTE (LEAD FREE)

PRODUCT DESCRIPTION

GSMC specifically designed this product for use as a front side contact for silicon solar cells which utilize an aluminum BSF (Back Surface Field). Metallization pastes by produced by GSMC help reduce manufacturing costs and increase the efficiency of photovoltaic solar cells.

PRODUCT BENEFITS

Suitable for SiNx ARCs	Optimized Silver Diffusion
Good Print Resolution	75um Narrow Grid
High Conductivity	Good Solderability
Low Contact Resistance	High Sheet Resistance
Lead-free	RoHS compliant
Typical Thickness after firing 20-25µm	Superior adhesion
Co-fireable with back-side Metallization	

TYPICAL PROPERTIES

Rheology:	Thixotropic, screen printable paste
Appearance	Silver gray
Viscosity:	33± 10kcps (Brookfield DV-II+CPC,#52, 20.0sec-1,25°C
Thixotropic Index @ 25°C	4-6 (Brookfield DV-II+CPC, #52, Visc. @ 0.5rpm/Visc. @ 10rpm
Sheet Resistivity	4±1 mΩ/ sq. at 10µm
Solid Content	80%-90%



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PROCESSING SUMMARY

Screen mesh/Emulsion	325-400 mesh / 30 μm
Drying	2-3 min at 200-250°C
Printed Thickness	0.14±0.01g at (W4.5mm*L153mm*2Line)
Firing	Furnace: Infrared Heated Zone: 165 inches Set Points: Zone 1-3: 300 °C, Zone 4: 365 °C, Zone 5: 465 °C, Zone 6-8: 550 °C, Zone 9: 600 °C, Zone 10 : 810 °C, Zone 11 : 920 °C Belt Speed 160 IPM
Peak Firing Temp	700-800°C

TYPICAL FIRING PROFILE

