

First-FLEX OSR (FF-OSR) is a completely new type of flexible OSR that consists of a thin-film multi-layer coating applied on the space-facing surface of a polymer foil.

The thermo-optical properties of the new OSR depend entirely on the coating named Interferential CERMET, while the substrate acts only as mechanical support that remains protected against direct interaction with the space environment.

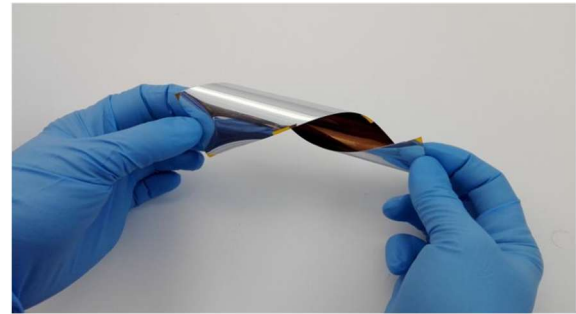
The coating meets the thermo-optical and surface conductivity requirements of an OSR application, shows negligible degradation upon long exposure to harsh space environments, withstands the bending and cutting of the foil, and protects the substrate from direct exposure to UV rays, charged particles, and atomic oxygen.

In short, FF-OSRs realize an advanced OSR solution that combines the performance and durability of quartz OSRs with the easy handling and cutting of Second Surface Mirrors (SSM).

FF-OSRs are all delivered with a transfer tape on the second surface, to ease application onto radiator panels.

FF-OSRs are all delivered with a protective tape on the first surface, to ease handling.

FF-OSRs are available also in an advanced configuration with perforated interconnects that establish electrical contact between the front and the back surface of the foil, so easing grounding operations.



FF-OSR – Polyimide substrate (3 mil thick)

PRODUCT PART NUMBER DEFINITION

The Product Part Number is built as follows:

FF-OSR[Mod][Sub][Adh][PT][Size]

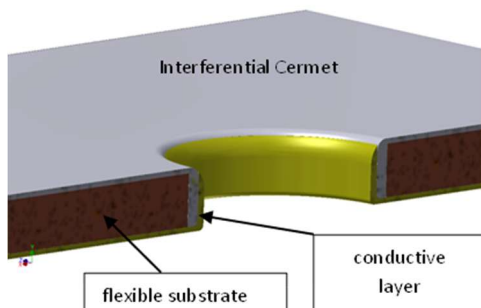
Model	[Mod]
Base	none
Advanced (with perforations)	-A

Substrate	[Sub]
KAPTON®FPC 3mil	-KFPC3
KAPTON®HN 2mil	-KHN2

Adhesive	[Adh]
3M™ 9703 ECATT	-9703
3M™ Transfer Tape 966	-966
3M™ Transfer Tape 9460	-9460

Protective Tape	[PT]
NITTO SPV 224 PR	none
NITTO SPV 4088R	-4088R
NITTO SPV 4058R	-4058R
Saint-Gobain CHR® M734	-M734

Size	[Size]
Full format 610x200 mm	none
Half format 305x200 mm	-305x200
Custom size within full format area (in mm)	-LxW



FF-OSR – Section view of Perforated Interconnects (not in scale).

Custom options are available under request sending an email to info@consorziocreo.it

Important Notice

This PIS contains typical information specific to products manufactured at the time of its publication.
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