

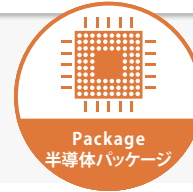
Encapsulation Materials for FOWLP/PLP

FOWLP/PLP用 半導体封止材



Applications 用途

Over-molding and wafer back-coating of advanced semiconductor packages, such as WLPs (FOWLPs and FIWLPs) and PLPs, for sophisticated mobile and wearable devices.
 先端モバイル・ウェアラブルデバイス用先端半導体パッケージなどの WLP、PLP のオーバーモールド、ウエハバックコートなど



Available in forms of granule, liquid according to the required encapsulation thickness and size, enabling compression molding and lamination molding. Respond to growing size and low warpage of thin packages and contribute to the increased productivity of advanced semiconductor packages.

封止厚みと一括封止サイズに応じて、顆粒・液状のラインナップを保有し、圧縮成形に対応可能。薄型パッケージの大判化・低反りに対応し、先端半導体パッケージの生産性向上に貢献。

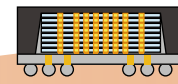
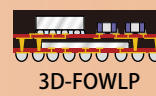
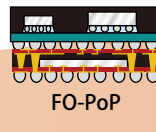
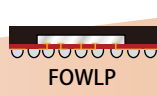
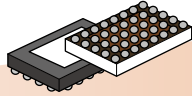
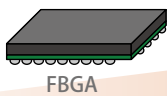
Low stress
低応力

Low shrinkage
低収縮率

Low temp. curability
低温硬化

FOWLP Technology Trend FOWLPの技術動向

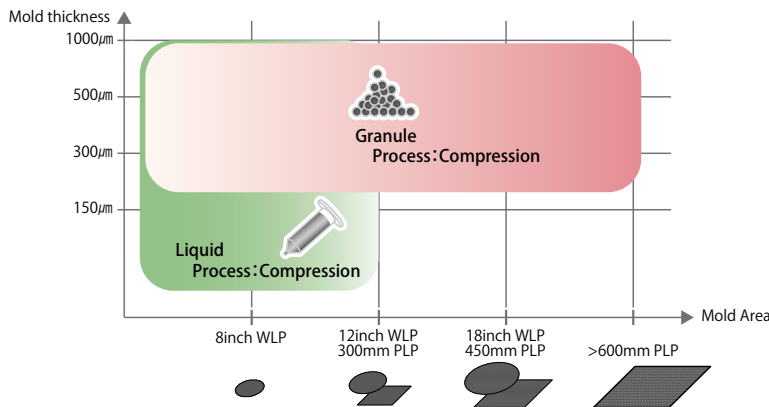
Contribute to low warpage and thinner product
低反りと薄型化に貢献



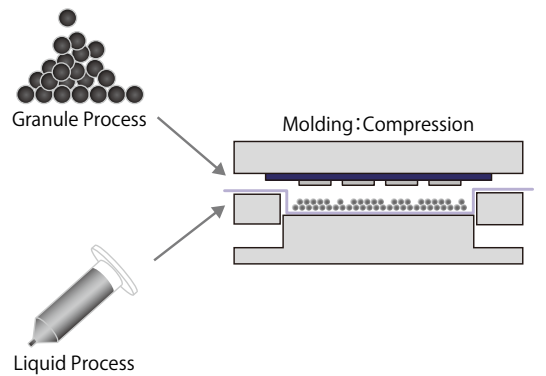
FOWLP tech.

Each material and corresponding package 各封止方法の比較

We have wide range of Encapsulation Line-up for WLP/PLP
WLP/PLP 向けに幅広い封止材ラインナップを取り揃えています。



Encapsulation method 各材料の封止プロセス



General properties 一般特性

Item	Unit	CV8511C	CV5788
Mold Size	—	Wafer Level / Panel Level	
Process	—	Chip First / Chip Last	
Form	—	Granule	Liquid
Mold shrinkage	%	0.1	0.06
Glass transition temp. (Tg)	°C	210	180
C.T.E.1	ppm/°C	9	10
C.T.E.2	ppm/°C	52	49
F.Modulus (R.T.)	GPa	9	18

The written property values are just an example of our product line-up. Please contact us for details. 特性値はラインナップ中の一例であり、詳細はお問合せください。