



# Encapsulation Materials for FOWLP/PLP

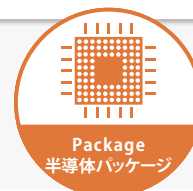
## FOWLP/PLP用 半導体封止材

CV2308 (Sheet)  
CV5791 (Liquid)  
CV8511C (EMC)

### 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, and sheet, 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・シート状のラインナップを保有し、圧縮成形やラミネート成形に対応可能。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。

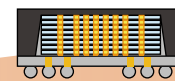
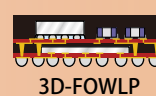
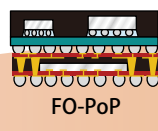
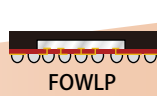
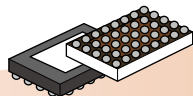
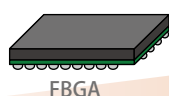
Low stress  
低応力

Low shrinkage  
低収縮率

Low temp.curability  
低温硬化

### FOWLP Technology Trend FOWLPの技術動向

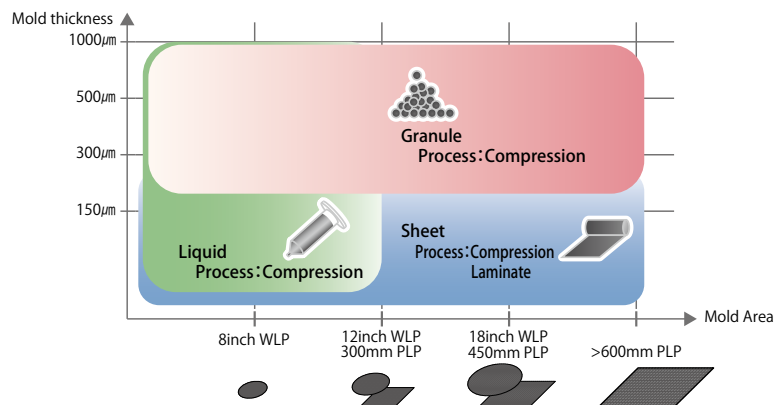
Contribute to low warpage and thinner product  
低反りと薄型化に貢献



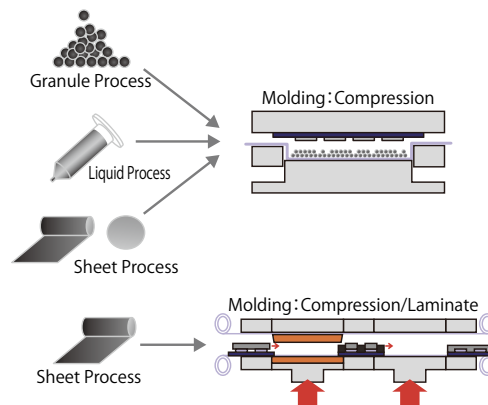
FOWLP tech.

### 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	CV2308	CV5791
Mold Size	—	Wafer Level / Panel Level		
Process	—	Chip First / Chip Last		
Form	—	Granule	Sheet	Liquid
Mold shrinkage	%	0.1	0.01	-0.05
Tg	°C	210	190	160
C.T.E.1	ppm/°C	9	7	12
C.T.E.2	ppm/°C	52	21	45
F.Modulus (R.T.)	GPa	9	15	14

The above data are typical values and not guaranteed values.

Please see the page for "Notes before you use" [商品のご採用に当たっての注意事項はこちら](#)