

High heat dissipation  
Stress reduction  
High adhesion

## Applications IC Package/Automotive

Automotive module, Inverter module for major appliances and industrial motors

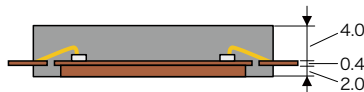
# LEXCM<sup>CF</sup>

## CV4180 CV4380

### For power modules high thermal conductive semiconductor encapsulation materials

Achieving high mountability and high heat dissipation (Package warpage control). Suitable for large packages with heat spreaders exposed (T/C resistance improvement due to stress reduction). Compatible with nickel plating (Achieved high adhesion).

#### Stress reduction: Thermal cycle (T/C) resistance

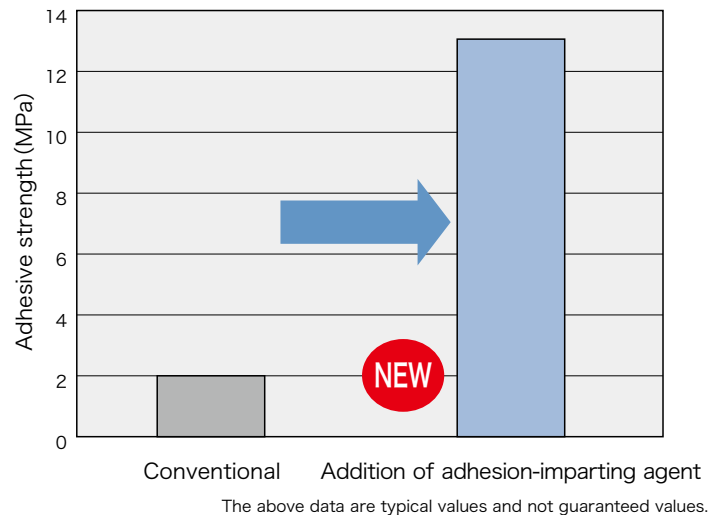
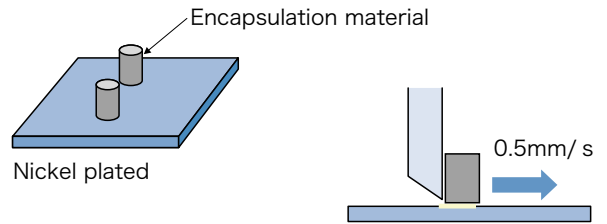


Mold size : 44x65x6.4mmt  
Die size : 40x50x0.4mmt  
Cu plate size : 36x46x2.0mmt

SAT image after TC -50°C (30 min) ↔ +150°C (30min)

	After cure	100 cycles	300 cycles	500 cycles
Ref E=20GPa				
New E=14GPa				

#### Nickel plating adhesion: Shear adhesive strength



#### Line-up

Part Number	Applications	Features
CV3300 / CV4380	Encapsulation of fully-molded module	High thermal conductive grade (1.7-2.3 W/mK)
CV4500 / CV4580		Super high thermal conductive grade (3.0-3.5 W/mK)
CV4100A / CV4180A	Encapsulation of module with heat spreader exposed	Low stress type for metallic substrates
CV4100B / CV4180B		Low stress type for ceramic substrates

Please see our website for Notes before you use.

[industrial.panasonic.com/ww/electronic-materials](http://industrial.panasonic.com/ww/electronic-materials)

Panasonic Industry CV4180