

PV-D SERIES

DESCRIPTION

Semiconducting polymers for organic photovoltaic (OPV) applications.

KEY BENEFITS

- Good processability and reproducibility
- Formulations available in non-chlorinated solvents
- High performance in standard and inverted solar cell structures for different layer thicknesses
- Attractive colour

TYPICAL DEVICE DATA FOR AN ORGANIC BULK HETEROJUNCTION SOLAR CELL

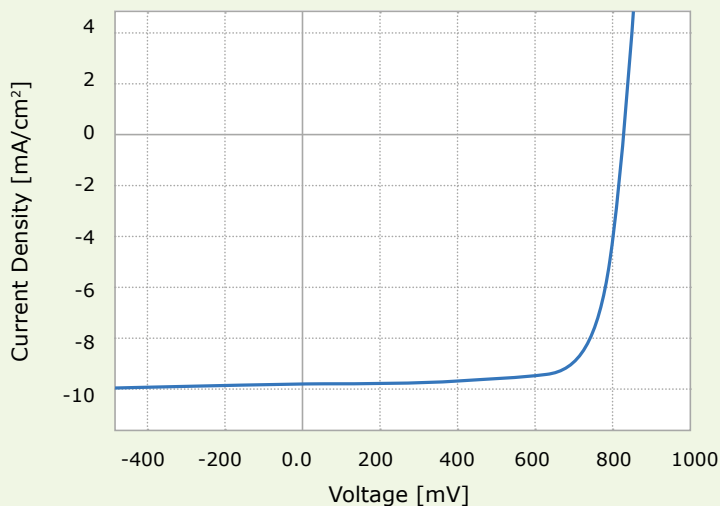
Device architecture	Power Conversion Efficiency*	VOC***	Fill factor
Standard*	> 6 %	800 mV	75 %
Inverted**	> 5.5 %	780 mV	50 %

* This data represents typical values obtained from our device configuration [Glass//ITO//PEDOT:PSS 20nm//lisicon® PV-D4600: lisicon® PV-A600 200nm//Ca 30nm//Al 200nm] in an organic bulk-heterojunction solar cell.

** This data represents typical values obtained from a non-optimised device configuration [Glass//ITO//ZnO 20nm//lisicon® PV-D4600: lisicon® PV-A600 200nm//PEDOT:PSS 20nm//Al 200nm] in an organic bulk-heterojunction solar cell.

*** Data obtained using EMD standard process using blade coating as coating method with lisicon® PV-D series.

EXAMPLE CURRENT/VOLTAGE-CHARACTERISTIC



Processing:

- Doctor-Blade coating
- Prepared under inert atmosphere

DEVICE PARAMETERS

(standard architecture):

- ITO coated glass substrate
- PEDOT:PSS
- lisicon® PV-D series/
lisicon® PV-A series blend
as an active layer (200nm)
- Ca//Al Electrode

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EMD Performance Materials is a business of
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