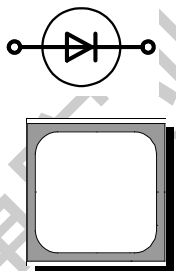


| Type | Ag* Al* | V _{DRM} / V _{R_{RM}} | I _{F(AV)} [A] | Chip Size [mm] x [mm] | Package Options |
|--------|---|--|------------------------|-----------------------|--|
| DWP 75 | <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> | 1800 | 115 | 8.70 8.70 | sawn on foil <input checked="" type="checkbox"/> unsawn wafer <input checked="" type="checkbox"/> * in waffle pack <input checked="" type="checkbox"/> |

*Frontside options

*Please contact IXYS chip sales



Mechanical Parameters

| | |
|-------------------------------|--|
| Area active | 53.98 mm ² |
| Area total | 75.69 mm ² |
| Wafer size Ø | 150 mm |
| Thickness | 265 µm |
| Material | Si |
| Max. possible chips per wafer | 177 |
| Passivation front side | Glassivation |
| Metallization top side | solderable: Al / Ti / Ni / Ag * |
| top side | bondable: Al |
| Metallization backside | solderable (only): Al / Ti / Ni / Ag * |
| Recom. wire bonds (Al) | Number 6 |
| | Ø 500 µm |
| Reject Ink Dot Size | Ø 0.4-1.0 mm |
| Recom. Storage Environment | |
| sawn on foil | in org. container, in dry nitrogen < 6 month |
| unsawn wafer | in org. container, in dry nitrogen < 2 year |
| in waffle pack | in org. container, in dry nitrogen < 2 year |
| T | -40 ... 40 °C |

Features

- planar technology
- anode top
- glassivation
- soft recovery rectifier diode

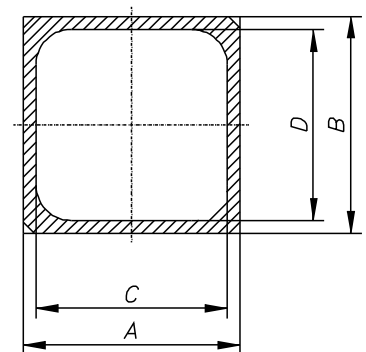
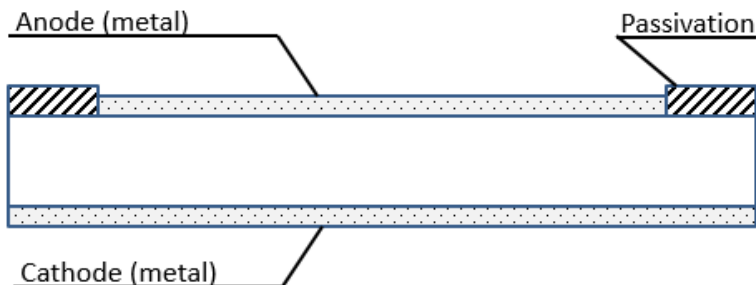
Applications

- DC Power Supplies
- Field Supply for DC motors
- Battery DC Power Supplies
- Power Rectifiers

*Sinterable top/bottom side on request

Dimensions

| A | B | C | D |
|------|------|------|------|
| [mm] | [mm] | [mm] | [mm] |
| 8.70 | 8.70 | 7.3 | 7.3 |



Electrical parameters

| Symbol | Conditions | Ratings | | |
|---------------|---|---------|------|-----------------------|
| | | min. | typ. | max. |
| V_D / V_R | $T_{VJ} = 25^\circ\text{C}$ | 1800 | | V |
| I_R | $V_R = V_{RRM}$ $T_{VJ} = 25^\circ\text{C}$ | | | 100 μA |
| | $V_R = 0.8 \cdot V_{RRM}$ $T_{VJ} = 150^\circ\text{C}$ | | | 2 mA |
| V_F | $I_F = 200 \text{ A}$ $T_{VJ} = 25^\circ\text{C}$ | | | 1.26 V |
| | $T_{VJ} = 125^\circ\text{C}$ | | | 1.22 V |
| V_{FO} | For power-loss calculations only | | | 0.86 V |
| r_F | $T_{VJ} = 150^\circ\text{C}$ | | | 1.8 m Ω |
| T_{VJ} | | -40 | | 150 $^\circ\text{C}$ |
| $I_{F(AV)}$ * | $T_C = 100^\circ\text{C}$ 180° rect. $T_{VJ} = 150^\circ\text{C}$ | | 115 | A |
| I_{FSM} * | $T_{VJ} = 45^\circ\text{C}$ t = 10 ms (50) Hz, sine | | | 1400 A |
| | $V_R = 0 \text{ V}$ t = 8.3 ms (60) Hz, sine | | | 1520 A |
| | $T_{VJ} = 150^\circ\text{C}$ t = 10 ms (50) Hz, sine | | | tbd A |
| | $V_R = 0 \text{ V}$ t = 8.3 ms (60) Hz, sine | | | tbd A |
| I^2t * | $T_{VJ} = 45^\circ\text{C}$ t = 10 ms (50) Hz, sine | | | 9800 A s ² |
| | $V_R = 0 \text{ V}$ t = 8.3 ms (60) Hz, sine | | | 9630 A s |
| | $T_{VJ} = 150^\circ\text{C}$ t = 10 ms (50) Hz, sine | | | tbd A s ² |
| | $V_R = 0 \text{ V}$ t = 8.3 ms (60) Hz, sine | | | tbd A s ² |
| R_{thJC} * | DC current | | | 0.33 K/W |

* Data according to assembled Chip

bondable version

Data according to IEC 60747

Terms of Conditions and Usage

The data contained in this product data sheet is exclusively intended for technically trained staff. The user will have to evaluate the suitability of the product for the intended application and the completeness of the product data with respect to his application. The specifications of our components may not be considered as an assurance of component characteristics. Should you require product information in excess of the data given in this product data sheet or which concerns the specific application of our product, please contact the sales office, which is responsible for you. Due to technical requirements our product may contain dangerous substances. For any information on the types in question please contact the sales office/partner, which is responsible for you.

Should you intend to use the product in aviation applications, in health or life endangering or life support applications, please notify. For any such applications we urgently recommend

- to perform joint risk and quality assessments;

- the conclusion of quality agreements;

- to establish joint measures to ensure application specific product capabilities and notify that IXYS may delivery dependent on the realization of any such measures.