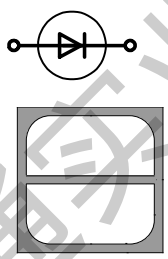


| Type | Ag* Al* | V _{RRM} [V] | I _F [A] | Chip Size [mm] x [mm] | Package |
|---------|--|-------------------------|-----------------------|--------------------------|--|
| DMLP 20 | <input type="checkbox"/> <input checked="" type="checkbox"/> | 200 | 60 | 4.45 4.45 | sawn on foil <input checked="" 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 | 16.40 mm ² |
| Area total | 19.80 mm ² |
| Wafer size Ø | 150 mm |
| Thickness | 250 µm |
| Material | Si |
| Max. possible chips per wafer | 780 |
| Passivation front side | Polyimide |
| Metallization top side | bondable: Al |
| Metallization backside | solderable (only): Al / Ti / Ni / Ag* |
| Recom. wire bonds (Al) | Anode Number 4 |
| | Ø 380 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 _{stg} -40 ... 40 °C |

Features:

- Polyimide passivated
- Anode top
- Epitaxial diode
- Pt doped

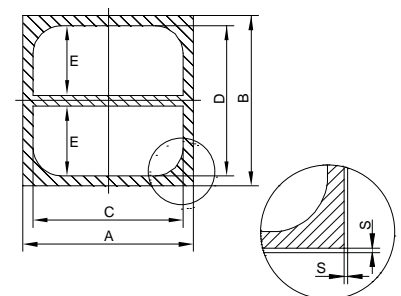
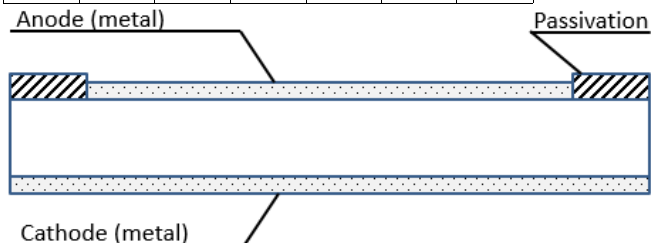
Applications

- Antiparallel diode for high frequency switching devices
- Antisaturation diode
- Snubber diode
- Free wheeling diode in converters and motor control circuits
- Rectifiers in switch mode power supplies (SMPS)
- Inductive heating
- Uninterruptible power supplies (UPS)
- Ultrasonic cleaners and welders
- PDP

*Sinterable top/bottom side on request

Dimensions

| A | B | C | D | E | F | G |
|------|------|------|------|------|------|------|
| [mm] | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] |
| 4.45 | 4.45 | 4.05 | 4.05 | 1.92 | | n/a |



Electrical parameters

| Symbol | Conditions | Ratings | | |
|---------------|---|---------|------|--------------------------------------|
| | | min. | typ. | max. |
| I_R | $V = V_R = V_{RRM}$ $T_{VJ} = 25^\circ\text{C}$ $T_{VJ} = 150^\circ\text{C}$ | | | 1 μA 200 μA |
| V_F | $I_F = 60 \text{ A}$ $T_{VJ} = 25^\circ\text{C}$ $T_{VJ} = 150^\circ\text{C}$ | | | 1.05 V 0.84 V |
| V_{F0} | For power-loss calculations only | | | 0.68 V |
| r_F | $T_{VJ} = 175^\circ\text{C}$ | | | 2 m Ω |
| T_{VJ} | | -40 | | 175 $^\circ\text{C}$ |
| $I_{F(AV)}$ * | $T_C = 125^\circ\text{C}$ 180° rect. $T_{VJ} = 175^\circ\text{C}$ | | | 60 A |
| I_{FSM} * | $T_{VJ} = 45^\circ\text{C}$ $t = 10 \text{ ms}$ (50 Hz), sine | | | 750 A |
| | $V_R = 0 \text{ V}$ $t = 8.3 \text{ ms}$ (60 Hz), sine | | | A |
| | $T_{VJ} = 175^\circ\text{C}$ $t = 10 \text{ ms}$ (50 Hz), sine | | | A |
| | $V_R = 0 \text{ V}$ $t = 8.3 \text{ ms}$ (60 Hz), sine | | | A |
| $I^2 t$ * | $T_{VJ} = 45^\circ\text{C}$ $t = 10 \text{ ms}$ (50 Hz), sine | | | 2810 A ² s |
| | $V_R = 0 \text{ V}$ $t = 8.3 \text{ ms}$ (60 Hz), sine | | | tbd A s |
| | $T_{VJ} = 175^\circ\text{C}$ $t = 10 \text{ ms}$ (50 Hz), sine | | | tbd A ² s |
| | $V_R = 0 \text{ V}$ $t = 8.3 \text{ ms}$ (60 Hz), sine | | | tbd A ² s |
| E_{AS} * | $I_{AS} = 9 \text{ A}$; $L = 100 \mu\text{H}$; $T_{VJ} = 25^\circ\text{C}$; non repetitive | | | tbd mJ |
| I_{AR} * | $V_A = 1.5 \cdot V_{RRM}$ typ.; $f = 10 \text{ kHz}$; repetitive | | | tbd A |
| R_{thJC} * | DC current | | | 0.9 K/W |
| t_T | $V_R = 100 \text{ V}$; $I_F = 60 \text{ A}$; $-di_F/dt = 200 \text{ A}/\mu\text{s}$ $T_{VJ} = 25^\circ\text{C}$ | | 45 | ns |
| I_{RM} | $V_R = 100 \text{ V}$; $I_F = 60 \text{ A}$; $-di_F/dt = \text{A}/\mu\text{s}$ $T_{VJ} = 25^\circ\text{C}$ | | 4 | A |

* Data according to assembled Chip

Data according to IEC 60747

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- 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.