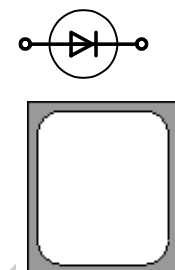


Type	Ag* Al*	V <sub>RRM</sub> [V]	I <sub>F(AV)</sub> [A]	Chip Size [mm] x [mm]	Package
DMHP 04	<input type="checkbox"/> Ag <input checked="" type="checkbox"/> Al	1200	6	3.00 1.50	sawn on foil <input checked="" type="checkbox"/> unsawn wafer <input checked="" type="checkbox"/> * in waffle pack <input checked="" type="checkbox"/>

\*Frontside options

\*Please contact IXYS chip sales

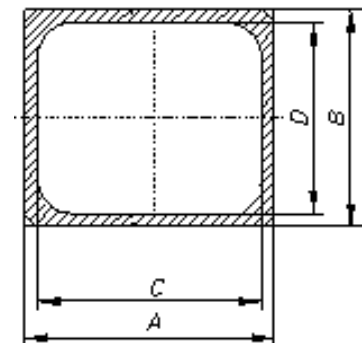
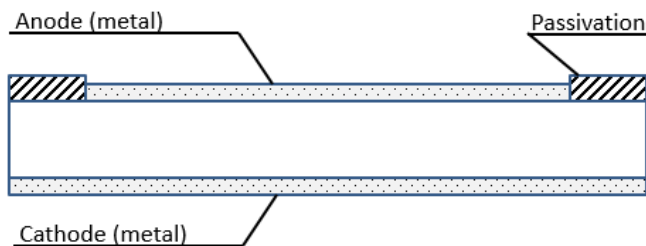


## Mechanical Parameters

Area active	1.31 mm <sup>2</sup>	<b>Features</b> <ul style="list-style-type: none"> <li>fast, soft SONIC diode</li> <li>low forward voltage drop</li> <li>small temperature coefficient</li> <li>low switching losses</li> <li>high ruggedness</li> <li>anode top</li> <li>T<sub>vjm</sub> = 175°C</li> </ul> <b>Applications</b> <ul style="list-style-type: none"> <li>antiparallel diode for high frequency switching devices</li> <li>antisaturation diode</li> <li>snubber diode</li> <li>free wheeling diode in converters and motor control circuits</li> <li>rectifiers in switch mode power supplies (SMPS)</li> <li>inductive heating and melting</li> <li>uninterruptible power supplies (UPS)</li> <li>ultrasonic cleaners and welders</li> </ul>
Area total	4.50 mm <sup>2</sup>	
Wafer size Ø	150 mm	
Thickness	290 µm	
Material	Si	
Passivation front side	Polyimide	
Metallization top side	bondable: Al	
Metallization backside	solderable (only): Al / Ti / NiV / Ag	
Recom. wire bonds (Al)	Anode Number 3	
* = stitch bonds	Ø 380 µm	
Reject Ink Dot Size	Ø 0.4-1.0 mm	
Recom. soldering temp.	< 300 °C	
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 <sub>stg</sub>	-40 ... 40 °C	

## Dimensions

A	B	C	D
[mm]	[mm]	[mm]	[mm]
3.00	1.50	1.94	0.44



## Electrical parameters

Symbol	Conditions	Ratings			
		min.	typ.	max.	
$I_R$	$V = V_{RRM}$ $T_{VJ} = 25^\circ\text{C}$ $T_{VJ} = 150^\circ\text{C}$		1	10	$\mu\text{A}$
			0.1		$\text{mA}$
$V_F$	$I_F = 3 \text{ A}$ $T_{VJ} = 25^\circ\text{C}$ $T_{VJ} = 150^\circ\text{C}$		1.90	2.20	$\text{V}$
			1.90		$\text{V}$
$V_{FO}$	For power-loss calculations only			1.2	$\text{V}$
$r_F$	$T_{VJ} = 175^\circ\text{C}$			300	$\text{m}\Omega$
$T_{VJ}$		-55		175	$^\circ\text{C}$
$I_{F(AV)}$ *	$T_C = 80^\circ\text{C}$ DC		6		$\text{A}$
$I_{FSM}$ *	$T_{VJ} = 45^\circ\text{C}$ $V = 0 \text{ V}$			20	$\text{A}$
$R_{thJC}$ *	DC current			5	$\text{K/W}$
$Q_n$	$V = 600 \text{ V};$ $I_F = 3 \text{ A}$ $-di_F/dt = 150 \text{ A}/\mu\text{s}$ $T_{VJ} = 25^\circ\text{C}$		0.20		$\mu\text{C}$
$I_{RM}$			4.50		$\text{A}$
$t_n$			200		$\text{ns}$
$E_{rec}$			0.03		$\text{mJ}$
$Q_n$			0.50		$\mu\text{C}$
$I_{RM}$	$V = 600 \text{ V};$ $I_F = 3 \text{ A}$ $-di_F/dt = 150 \text{ A}/\mu\text{s}$ $T_{VJ} = 125^\circ\text{C}$		5.50		$\text{A}$
$t_n$			350		$\text{ns}$
$E_{rec}$			0.10		$\text{mJ}$

\* Data according to assembled 380  $\mu\text{m}$  DCB

Data according to IEC 60747

## Terms of Conditions and Usage

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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.