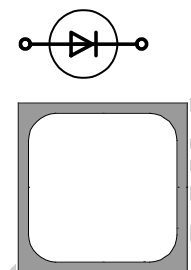


Type	Ag* Al*	V _{RRM} [V]	I _{F(AV)} [A]	Chip Size [mm] x [mm]	Package
DMHP 15	<input type="checkbox"/> Ag <input checked="" type="checkbox"/> Al	1200	25	3.95 3.95	sawn on foil <input checked="" type="checkbox"/> unsawn wafer <input checked="" type="checkbox"/> * in waffle pack <input checked="" type="checkbox"/>

*Frontside options

*Please contact IXYS chip sales

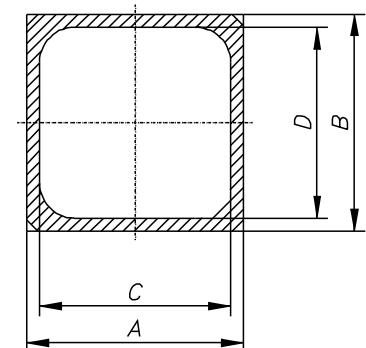
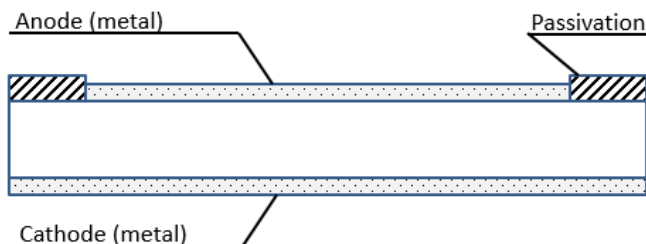


Mechanical Parameters

Area active	9.40 mm ²	Features <ul style="list-style-type: none"> fast, soft SONIC diode low forward voltage drop small temperature coefficient low switching losses high ruggedness anode top T_{vjm} = 175°C Applications <ul style="list-style-type: none"> 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 and melting uninterruptible power supplies (UPS) ultrasonic cleaners and welders
Area total	15.60 mm ²	
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 4	
* = stitch bonds	Ø 300 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 _{stg}		-40 ... 40 °C

Dimensions

A	B	C	D
[mm]	[mm]	[mm]	[mm]
3.95	3.95	2.89	2.89



Electrical parameters

Symbol	Conditions	Ratings			
		min.	typ.	max.	
I_R	$V = V_{RRM}$ $T_{VJ} = 25^\circ\text{C}$ $T_{VJ} = 150^\circ\text{C}$		5	25	μA
			0.4		mA
V_F	$I_F = 20\text{ A}$ $T_{VJ} = 25^\circ\text{C}$ $T_{VJ} = 150^\circ\text{C}$		1.90	2.20	V
			1.90		V
V_{F0}	For power-loss calculations only			1.2	V
r_F	$T_{VJ} = 175^\circ\text{C}$			45	$\text{m}\Omega$
T_{VJ}		-55		175	$^\circ\text{C}$
$I_{F(AV)}$ *	$T_C = 80^\circ\text{C}$ DC		25		A
I_{FSM} *	$T_{VJ} = 45^\circ\text{C}$ $V = 0\text{ V}$			150	A
R_{thJC} *	DC current			1.5	K/W
Q_n	$V = 600\text{ V};$ $I_F = 20\text{ A}$ $-di_F/dt = 400\text{ A}/\mu\text{s}$ $T_{VJ} = 25^\circ\text{C}$		1.3		μC
I_{RM}			15		A
t_n			200		ns
E_{rec}			0.3		mJ
Q_n		$V = 600\text{ V};$ $I_F = 20\text{ A}$ $-di_F/dt = 400\text{ A}/\mu\text{s}$ $T_{VJ} = 125^\circ\text{C}$		3	
I_{RM}			20		A
t_n			350		ns
E_{rec}			0.7		mJ

* Data according to assembled 380 μm 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.