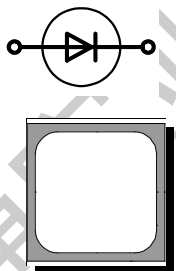


Type	Ag* Al*	V _{DRM} / V _{R_{RM}}	I _{F(AV)} [A]	Chip Size [mm] x [mm]	Package Options
DWP 17	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	1800	31	4.45 4.45	sawn on foil <input checked="" type="checkbox"/> unsawn wafer <input checked="" type="checkbox"/> * in waffle pack <input checked="" type="checkbox"/>

*Frontside options

*Please contact IXYS chip sales



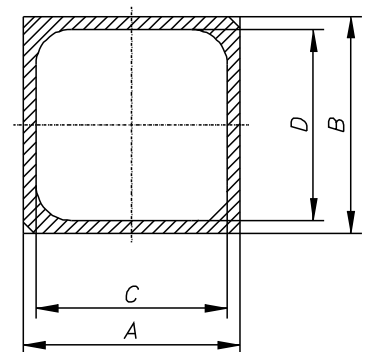
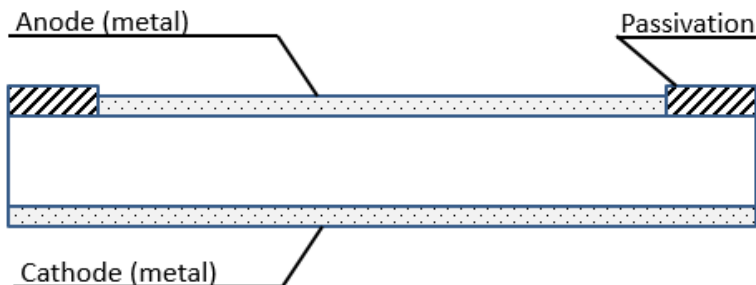
Mechanical Parameters

Area active	9.53 mm ²	Features <ul style="list-style-type: none"> planar technology anode top glassivation soft recovery rectifier diode Applications <ul style="list-style-type: none"> DC Power Supplies Field Supply for DC motors Battery DC Power Supplies Power Rectifiers
Area total	19.80 mm ²	
Wafer size Ø	150 mm	
Thickness	265 µm	
Material	Si	
Max. possible chips per wafer	688	
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 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	-40 ... 40 °C	

*Sinterable top/bottom side on request

Dimensions

A	B	C	D
[mm]	[mm]	[mm]	[mm]
4.45	4.45	3.05	3.05



Electrical parameters

Symbol	Conditions	Ratings		
		min.	typ.	max.
V_D / V_R	$T_{VJ} = 25^\circ\text{C}$	1800		V
I_R	$V_R = V_{RRM}$ $T_{VJ} = 25^\circ\text{C}$			20 μA
	$V_R = 0.8 \cdot V_{RRM}$ $T_{VJ} = 150^\circ\text{C}$			1.5 mA
V_F	$I_F = 50 \text{ A}$ $T_{VJ} = 25^\circ\text{C}$			1.30 V
	$T_{VJ} = 150^\circ\text{C}$			1.37 V
V_{FO}	For power-loss calculations only			0.89 V
r_F	$T_{VJ} = 150^\circ\text{C}$			9.8 m Ω
T_{VJ}		-40		150 $^\circ\text{C}$
$I_{F(AV)}$ *	$T_C = 100 \text{ }^\circ\text{C}$ 180° rect. $T_{VJ} = 150^\circ\text{C}$		31	A
I_{FSM} *	$T_{VJ} = 45^\circ\text{C}$ t = 10 ms (50) Hz, sine			320 A
	$V_R = 0 \text{ V}$ t = 8.3 ms (60) Hz, sine			350 A
	$T_{VJ} = 150^\circ\text{C}$ t = 10 ms (50) Hz, sine			270 A
	$V_R = 0 \text{ V}$ t = 8.3 ms (60) Hz, sine			290 A
I^2t *	$T_{VJ} = 45^\circ\text{C}$ t = 10 ms (50) Hz, sine			510 A s ²
	$V_R = 0 \text{ V}$ t = 8.3 ms (60) Hz, sine			510 A s
	$T_{VJ} = 150^\circ\text{C}$ t = 10 ms (50) Hz, sine			360 A s ²
	$V_R = 0 \text{ V}$ t = 8.3 ms (60) Hz, sine			350 A s ²
R_{thJC} *	DC current			1.10 K/W

* Data according to assembled Chip

VHFD (bondable)

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.