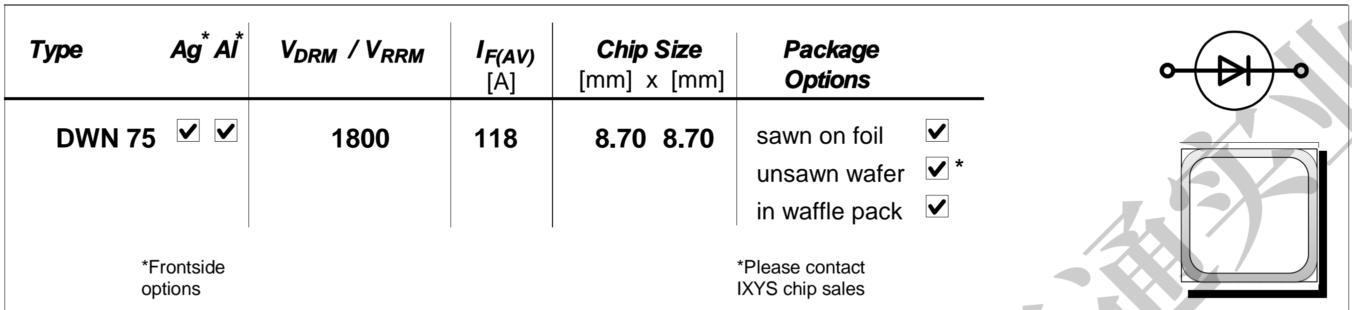
IXYS Diode Chip DWN 75-18



Type	Ag^*	Al^*	V_{DRM} / V_{RRM}	$I_{F(AV)}$ [A]	Chip Size [mm] x [mm]	Package Options	
DWN 75	☑	☑	1800	118	8.70 8.70	sawn on foil	☑
						unsawn wafer	☑ *
						in waffle pack	☑

*Frontside options

*Please contact IXYS chip sales

Mechanical Parameters

Area active		56.03	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	5	
	Ø	300	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

Features

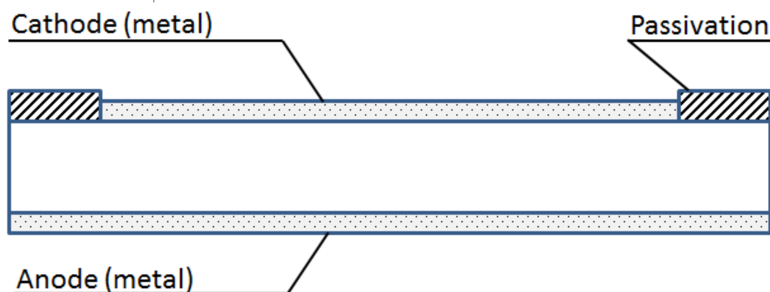
- with separation diffusion
- cathode top

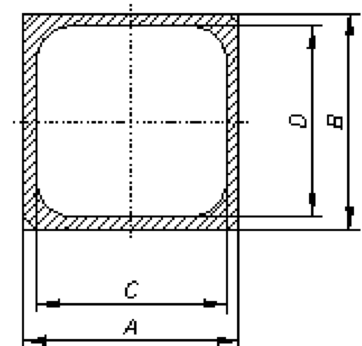
Applications

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

Dimensions

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





深圳佳讯通实业

IXYS reserve the right to change limits, conditions and dimensions.

20151215a

© 2016 IXYS all rights reserved

Electrical parameters

Symbol		Conditions			Ratings min.	typ.	max.	
V_D / V_R		T_{VJ} = 25°C			1800			V
I_R		$V_R = V_{RRM}$	T_{VJ} = 25°C				100	μA
		$V_R = 0.8 \cdot V_{RRM}$	T_{VJ} = 150°C				2	mA
V_F		I_F = 200 A	T_{VJ} = 25°C				1.25	V
			T_{VJ} = 150°C				1.20	V
V_{F0}		For power-loss calculations only					0.86	V
r_F		T_{VJ} = 150°C					1.7	mΩ
T_{VJ}					-40		150	°C
$I_{F(AV)}$	*	T_C = 100 °C	180° rect.	T_{VJ} = 150°C		118		A
I_{FSM}	*	T_{VJ} = 45°C	t = 10 ms (50) Hz, sine				1800	A
		V_R = 0 V	t = 8.3 ms (60) Hz, sine				2000	A
		T_{VJ} = 150°C	t = 10 ms (50) Hz, sine				1600	A
		V_R = 0 V	t = 8.3 ms (60) Hz, sine				1700	A
I^2t	*	T_{VJ} = 45°C	t = 10 ms (50) Hz, sine				16200	A s^2
		V_R = 0 V	t = 8.3 ms (60) Hz, sine				16670	A s
		T_{VJ} = 150°C	t = 10 ms (50) Hz, sine				12800	A s^2
		V_R = 0 V	t = 8.3 ms (60) Hz, sine				12040	A s^2
R_{thJC}	*	DC current					0.35	K/W

* Data according to assembled Chip (solderable chip) Data according to IEC 60747

Note: For solderable version I_FSM = 90% of stated

深圳佳讯通实业

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.

IXYS reserve the right to change limits, conditions and dimensions.

© 2016 IXYS all rights reserved