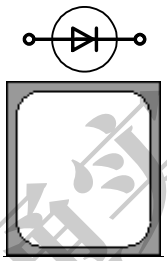
IXYS Diode Chip DWLP 75-03

HiPer FRED

Type	Ag* Al*	V_{RRM} [V]	I_F [A]	Chip Size [mm] x [mm]	Package Options
DWLP 75	☑ ☑	300	100	8.91 7.22	sawn on foil ☑ unsawn wafer ☑* in waffle pack ☑

*Frontside options

*Please contact IXYS chip sales



Mechanical Parameters

Area active		49.03	mm^2
Area total		64.33	mm^2
Wafer size Ø		150	mm
Thickness		340	µm
Material		Si	
Max. possible chips per wafer		220	
Passivation front side		Glass	
Metallization top side		bondable or solderable	
Metallization backside		solderable (only): Al / Ti / Ni / Ag	
Recom. wire bonds (Al)	Anode	Number 18*	
* Stitch bonds		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

*Sinterable top/bottom side on request

Features:

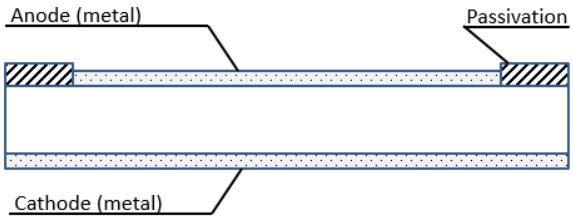
- Anode top
- Pt doped
- Epitaxial diode
- Planar surface
- Glass passivated

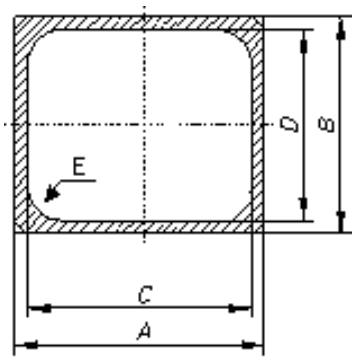
Applications:

- 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

Dimensions

A [mm]	B [mm]	C [mm]	D [mm]	E [mm]
8.91	7.22	7.91	6.22	0.20





Electrical parameters

Symbol	Conditions		Ratings min.	typ.	max.	
I_R	$V = V_{RRM}$	$T_{VJ} = 25°C$			20	µA
		$T_{VJ} = 150°C$			4	mA
V_F	$I_F = 100$ A	$T_{VJ} = 25°C$			1.43	V
		$T_{VJ} = 150°C$			0.96	V
V_{F0}	For power-loss calculations only				0.68	V
r_F	$T_{VJ} = 175°C$				1.70	mΩ
T_{VJ}			-55		175	°C
$I_{F(AV)}$ *	$T_C = 125°C$; 180° rect.				100	A
I_{FSM} *	$T_{VJ} = 45°C$; t = 10 ms (50 Hz), sine				1000	A
R_{thJC} *	DC current				0.4	K/W
t_{rr}	$V_R = 30$	$I_F = 1$ A; $-di_F/dt = 400$ A/µs; $T_{VJ} = 25°C$		30		ns
I_{RM}	$V_R = 100$	$I_F = 200$ A; $-di_F/dt = 100$ A/µs; $T_{VJ} = 25°C$			3.30	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.