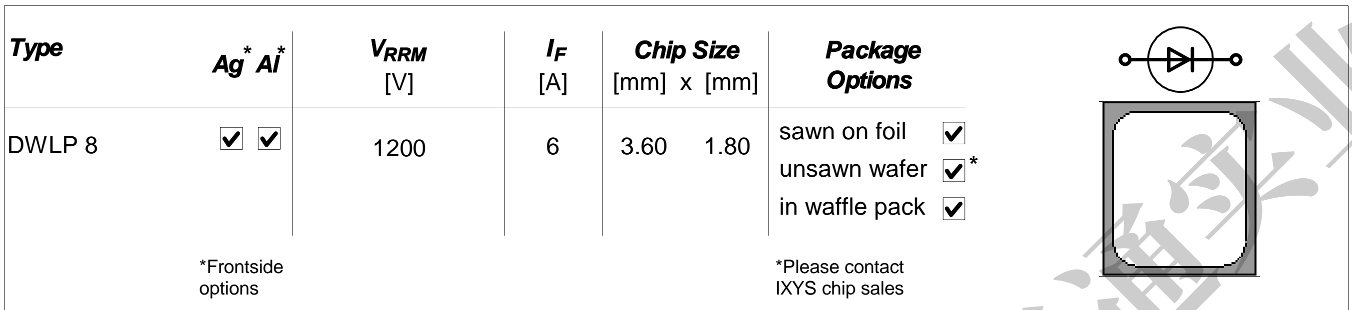
IXYS Diode Chip DWLP 8-12

HiPer FRED



Type	Ag*	Al*	V_{RRM} [V]	I_F [A]	Chip Size [mm] x [mm]	Package Options	
DWLP 8	✓	✓	1200	6	3.60 x 1.80	sawn on foil	✓
						unsawn wafer	✓*
						in waffle pack	✓

*Frontside options

*Please contact IXYS chip sales

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Mechanical Parameters

Area active		2.40	mm²
Area total		6.48	mm²
Wafer size Ø		150	mm
Thickness		425	µm
Material		Si	
Max. possible chips per wafer		2362	
Passivation front side		Glass	
Metallization top side		bondable or solderable	
Metallization backside		solderable (only): Al / Ti / Ni / Ag	
Recom. wire bonds (Al)	Anode	Number 2	
		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:

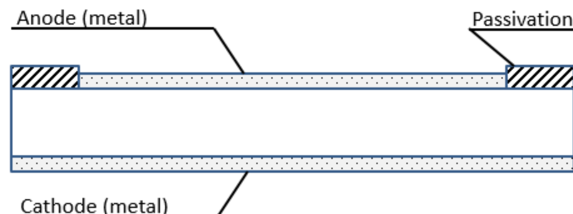
- Anode top
- Pt doped
- Epitaxial diode
- Planar surface
- Glass passivated

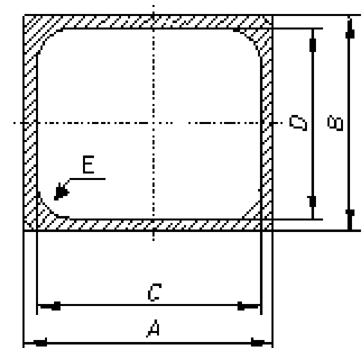
Applications:

- 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]
3.60	1.80	2.70	0.90	0.20





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Electrical parameters

Symbol	Conditions				Ratings min.	typ.	max.	
I_R	$V = V_{RRM}$	$T_{VJ} = 25°C$					10	µA
		$T_{VJ} = 150°C$					0.25	mA
V_F	$I_F = 6$ A	$T_{VJ} = 25°C$					2.61	V
		$T_{VJ} = 150°C$					1.67	V
V_{F0}	For power-loss calculations only						1.09	V
r_F	$T_{VJ} = 175°C$						61.00	mΩ
T_{VJ}					-55		175	°C
$I_{F(AV)}$ *	$T_C = 125°C$;	180° rect.					6	A
I_{FSM} *	$T_{VJ} = 45°C$;	t = 10 ms (50 Hz), sine					40	A
R_{thJC} *	DC current						2.5	K/W
t_{rr}	$V_R = 30$	$I_F = 1$ A;	$-di_F/dt = 50$	A/µs; $T_{VJ} = 25°C$		40		ns
I_{RM}	$V_R = 100$	$I_F = 12$ A;	$-di_F/dt = 100$	A/µs; $T_{VJ} = 25°C$			5.00	A

* Data according to assembled Chip

Data according to IEC 60747

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