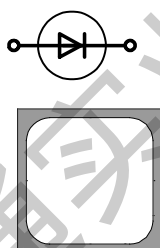


Type	Ag* Al*	V _{RRM} [V]	I _F [A]	Chip Size [mm] x [mm]	Package
DMLP 15	<input type="checkbox"/> <input checked="" type="checkbox"/>	400	40	3.90 3.90	sawn on foil <input checked="" type="checkbox"/> unsawn wafer <input checked="" type="checkbox"/> in waffle pack <input checked="" type="checkbox"/>
*Frontside options		*Please contact IXYS chip sales			



Mechanical Parameters

Area active	12.25	mm ²
Area total	15.21	mm ²
Wafer size Ø	150	mm
Thickness	250	µm
Material	Si	
Max. possible chips per wafer	970	
Passivation front side	Polyimide	
Metallization top side	bondable: Al	
Metallization backside	solderable (only): Al / Ti / Ni / Ag*	
Recom. wire bonds (Al)	Anode	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 _{stg}	-40 ... 40 °C

Features:

- Polyimide passivated
- Anode top
- Epitaxial diode
- Pt doped

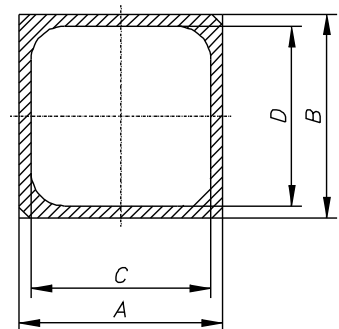
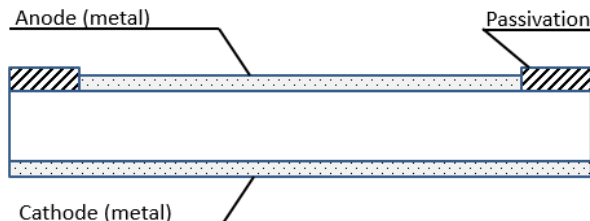
Applications

- 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

*Sinterable top/bottom side on request

Dimensions

A	B	C	D
[mm]	[mm]	[mm]	[mm]
3.90	3.90	3.50	3.50



Electrical parameters

Symbol	Conditions	Ratings		
		min.	typ.	max.
I_R	$V = V_R = V_{RRM}$ $T_{VJ} = 25^\circ\text{C}$ $T_{VJ} = 150^\circ\text{C}$			1 μA
				400 μA
V_F	$I_F = 40\text{ A}$ $T_{VJ} = 25^\circ\text{C}$ $T_{VJ} = 150^\circ\text{C}$			1.35 V
				1.05 V
V_{F0}	For power-loss calculations only			0.7 V
r_F	$T_{VJ} = 175^\circ\text{C}$			5 m Ω
T_{VJ}		-40		175 $^\circ\text{C}$
$I_{F(AV)}$ *	$T_C = 125^\circ\text{C}$ 180° rect. $T_{VJ} = 175^\circ\text{C}$			A
I_{FSM} *	$T_{VJ} = 45^\circ\text{C}$ $t = 10\text{ ms}$ (50 Hz), sine $V_R = 0\text{ V}$ $t = 8.3\text{ ms}$ (60 Hz), sine			400 A
				430 A
	$T_{VJ} = 175^\circ\text{C}$ $t = 10\text{ ms}$ (50 Hz), sine $V_R = 0\text{ V}$ $t = 8.3\text{ ms}$ (60 Hz), sine			350 A
				370 A
ρt *	$T_{VJ} = 45^\circ\text{C}$ $t = 10\text{ ms}$ (50 Hz), sine $V_R = 0\text{ V}$ $t = 8.3\text{ ms}$ (60 Hz), sine			800 A ² s
				770 A ² s
	$T_{VJ} = 175^\circ\text{C}$ $t = 10\text{ ms}$ (50 Hz), sine $V_R = 0\text{ V}$ $t = 8.3\text{ ms}$ (60 Hz), sine			610 A ² s
				570 A ² s
E_{AS} *	$I_{AS} = \text{A}$; $L = 100\ \mu\text{H}$; $T_{VJ} = 25^\circ\text{C}$; non repetitive			tbd mJ
I_{AR} *	$V_A = 1.5 \cdot V_{RRM}$ typ.; $f = 10\text{ kHz}$; repetitive			tbd A
R_{thJC} *	DC current			1.1 K/W
t_{rr}	$V_R = 100\text{ V}$; $I_F = 40\text{ A}$; $-di_F/dt = 200\text{ A}/\mu\text{s}$ $T_{VJ} = 25^\circ\text{C}$		45	ns
I_{RM}	$V_R = 100\text{ V}$; $I_F = 40\text{ A}$; $-di_F/dt = 200\text{ A}/\mu\text{s}$ $T_{VJ} = 25^\circ\text{C}$		4	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.