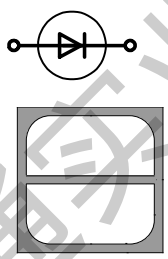


Type	Ag* Al*	V _{RRM} [V]	I _F [A]	Chip Size [mm] x [mm]	Package
DMLP 20	<input type="checkbox"/> <input checked="" type="checkbox"/>	400	60	4.45 4.45	sawn on foil <input checked="" type="checkbox"/> unsawn wafer <input checked="" type="checkbox"/> in waffle pack <input checked="" type="checkbox"/>

*Frontside options

*Please contact IXYS chip sales



Mechanical Parameters

Area active	16.40 mm ²
Area total	19.80 mm ²
Wafer size Ø	150 mm
Thickness	250 µm
Material	Si
Max. possible chips per wafer	780
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

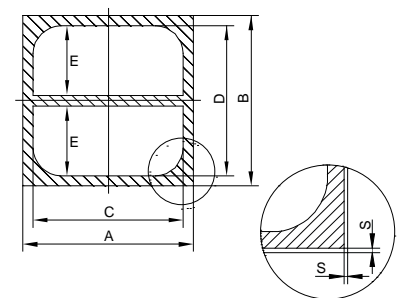
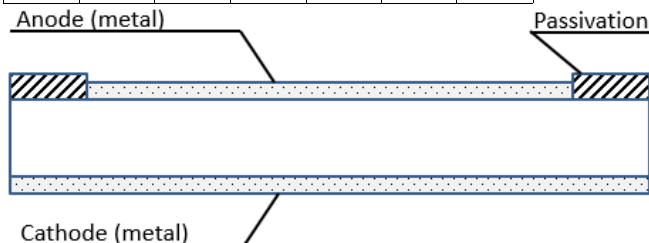
Applications

- 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	E	F	G
[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
4.45	4.45	4.05	4.05	1.92		n/a



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
				300 μA
V_F	$I_F = 60 \text{ A}$ $T_{VJ} = 25^\circ\text{C}$ $T_{VJ} = 150^\circ\text{C}$			1.35 V
				1.08 V
V_{F0}	For power-loss calculations only			0.81 V
r_F	$T_{VJ} = 175^\circ\text{C}$			3.5 $\text{m}\Omega$
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			550 A
	$V_R = 0 \text{ V}$ $t = 8.3 \text{ ms}$ (60 Hz), sine			600 A
	$T_{VJ} = 175^\circ\text{C}$ $t = 10 \text{ ms}$ (50 Hz), sine			460 A
	$V_R = 0 \text{ V}$ $t = 8.3 \text{ ms}$ (60 Hz), sine			510 A
$I^2 t$ *	$T_{VJ} = 45^\circ\text{C}$ $t = 10 \text{ ms}$ (50 Hz), sine			1510 A^2s
	$V_R = 0 \text{ V}$ $t = 8.3 \text{ ms}$ (60 Hz), sine			1500 A^2s
	$T_{VJ} = 175^\circ\text{C}$ $t = 10 \text{ ms}$ (50 Hz), sine			1060 A^2s
	$V_R = 0 \text{ V}$ $t = 8.3 \text{ ms}$ (60 Hz), sine			1080 A^2s
E_{AS} *	$I_{AS} = 9 \text{ A}$; $L = 100 \mu\text{H}$; $T_{VJ} = 25^\circ\text{C}$; 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			0.8 K/W
t_T	$V_R = 100 \text{ V}$; $I_F = 60 \text{ A}$; $-di_F/dt = 200 \text{ A}/\mu\text{s}$ $T_{VJ} = 25^\circ\text{C}$		45	ns
I_{RM}	$V_R = 100 \text{ V}$; $I_F = 60 \text{ A}$; $-di_F/dt = 200 \text{ A}/\mu\text{s}$ $T_{VJ} = 25^\circ\text{C}$		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.