

Type	Ag* Al*	V _{RRM} [V]	I _F [A]	Chip Size [mm] x [mm]	Package
DMLP 43	<input type="checkbox"/> <input checked="" type="checkbox"/>	300	60	8.65 4.95	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	30.80	mm ²
Area total	42.82	mm ²
Wafer size Ø	150	mm
Thickness	250	µm
Material	Si	
Max. possible chips per wafer	340	
Passivation front side	Polyimide	
Metallization top side	bondable: Al	
Metallization backside	solderable (only): Al / Ti / Ni / Ag*	
Recom. wire bonds (Al)	Anode Number 20	
	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:

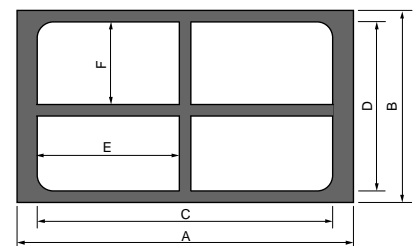
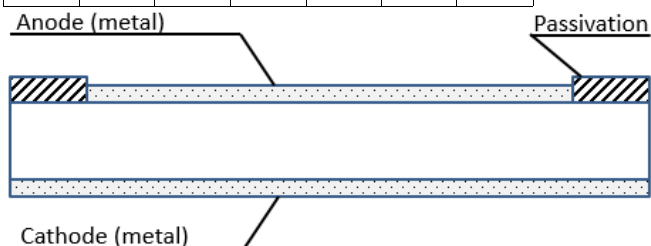
- Polyimide passivated
- Anode top
- Epitaxial diode
- Pt doped

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

Dimensions

A	B	C	D	E	F	G
[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
8.65	4.95	7.70	4.00	3.75	1.90	n/a



Electrical parameters

Symbol	Conditions	Ratings		
		min.	typ.	max.
I_R	$V = V_R = V_{RRM}$ $T_{VJ} = 25^\circ\text{C}$ $T_{VJ} = 150^\circ\text{C}$			10 μA 1000 μA
V_F	$I_F = 60 \text{ A}$ $T_{VJ} = 25^\circ\text{C}$ $T_{VJ} = 150^\circ\text{C}$			1.32 V 0.93 V
V_{F0}	For power-loss calculations only			0.7 V
r_F	$T_{VJ} = 175^\circ\text{C}$			2.4 $\text{m}\Omega$
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			1050 A
	$V_R = 0 \text{ V}$ $t = 8.3 \text{ ms}$ (60 Hz), sine			A
	$T_{VJ} = 175^\circ\text{C}$ $t = 10 \text{ ms}$ (50 Hz), sine			A
	$V_R = 0 \text{ V}$ $t = 8.3 \text{ ms}$ (60 Hz), sine			A
$I^2 t$ *	$T_{VJ} = 45^\circ\text{C}$ $t = 10 \text{ ms}$ (50 Hz), sine			5510 A^2s
	$V_R = 0 \text{ V}$ $t = 8.3 \text{ ms}$ (60 Hz), sine			tbd A s
	$T_{VJ} = 175^\circ\text{C}$ $t = 10 \text{ ms}$ (50 Hz), sine			tbd A^2s
	$V_R = 0 \text{ V}$ $t = 8.3 \text{ ms}$ (60 Hz), sine			tbd 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			tbd K/W
t_T	$V_R = 100 \text{ V}$; $I_F = 60 \text{ A}$; $-di_F/dt = 200 \text{ A}/\mu\text{s}$ $T_{VJ} = 25^\circ\text{C}$		50	ns
I_{RM}	$V_R = 100 \text{ V}$; $I_F = 60 \text{ A}$; $-di_F/dt = 200 \text{ A}/\mu\text{s}$ $T_{VJ} = 25^\circ\text{C}$		2.8	A

* Data according to assembled Chip

Data according to IEC 60747

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- 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.