



Platin FRED tentative

Туре	Ag <sup>*</sup> Al <sup>*</sup>	<b>V<sub>RRM</sub></b> [∨]	<i>I<sub>F</sub></i> [A]	_	Size ( [mm]	Package
DMLP 69		400	100	8.91	7.22	sawn on foil ✓ unsawn wafer ✓* in waffle pack ✓
	*Frontside options		·			Please contact XYS chip sales

#### **Mechanical Parameters**

Area active 49.63 mm<sup>2</sup> Area total 64.33 mm<sup>2</sup> Wafer size Ø 150 mm **Thickness** 250 μm Si Material Max. possible chips per wafer 208 Passivation front side Polyimide Metallization top side bondable: Αl solderable (only): AI / Ti / Ni / Ag\* Metallization backside Recom. wire bonds (AI) Anode Number 14\* \*Stiitchbonds Ø 380 µm Reject Ink Dot Size Ø 0.4-1.0 mm Recom. Storage Environment in org. container, in dry nitrogen < 6 month sawn on foil in org. container, in dry nitrogen < 2 year unsawn wafer in org. container, in dry nitrogen < 2 year in waffle pack T<sub>sta</sub> -40 ... 40 °C \*Sinterable top/bottom side on request

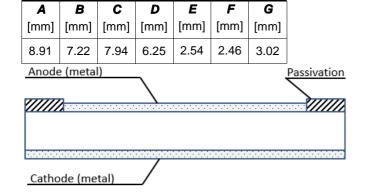
#### Features:

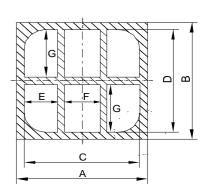
- Polyimide passivated
- Anode top
- ●Epitaxial diode
- Pt doped

## **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**





Platin FRED tentative

Electrica	al parameters				4 1
Symbol	Conditions		Ratings		
		min.	typ.	max.	
I <sub>R</sub>	$V = V_R = V_{RRM}  T_{VJ} = 25^{\circ}C$			10	μΑ
	$T_{VJ} = ^{\circ}C$		_ <	500	μΑ
V <sub>F</sub>	I <sub>F</sub> = 100 A T <sub>VJ</sub> = 25°C		40	1.05	V
	T <sub>vJ</sub> = 150°C			0.81	V
V <sub>F0</sub>	For power-loss calculations only				V
r <sub>F</sub>	T <sub>vJ</sub> 175°C				$ m \Omega$
$T_{VJ}$		-40	7	175	°C
I <sub>F(AV)</sub> *	T <sub>c</sub> = 100 °C 180° rect. T <sub>VJ</sub> = 175°C				Α
I <sub>FSM</sub> *	$T_{V,I} = 45^{\circ}C$ $t = 10$ ms (50 Hz), sine	X/		1500	А
	$V_R = 0 \text{ V}$ $t = 8.3 \text{ ms } (60 \text{ Hz}), \text{ sine}$				Α
	$T_{VJ} = 175  ^{\circ}\text{C}$ $t = 10  \text{ms} (50  \text{Hz}), \text{ sine}$				Α
	$V_R = 0 \text{ V}$ $t = 8.3 \text{ ms } (60 \text{ Hz}), \text{ sine}$				Α
Pt *	$T_{VJ} = 45^{\circ}C$ $t = 10$ ms (50 Hz), sine			11250	$A^2s$
	$V_R = 0 \text{ V}$ $t = 8.3 \text{ ms } (60 \text{ Hz}), \text{ sine}$			tbd	As
	$T_{VJ} = 175  ^{\circ}\text{C}$ $t = 10  \text{ms} (50  \text{Hz}), \text{ sine}$			tbd	A 2s
	$V_{R} = 0 \text{ V}$ $t = 8.3 \text{ ms } (60 \text{ Hz}), \text{ sine}$			tbd	$A^2s$
E <sub>AS</sub> *	$I_{AS} = A; L = \mu H; T_{VJ} = 25$ °C; non repetitive			tbd	mJ
I <sub>AR</sub> *	$V_A = 1.5 \cdot V_{RRM}$ typ.; f = 10 kHz; repetitive			tbd	Α
R <sub>thJC</sub> *	DC current			0.4	K/W
t,,	$V_R = 100 \text{ V}$ ; I <sub>F</sub> 100 A; -di <sub>F</sub> /dt 200 A/µs $T_{V,I} = 25^{\circ}\text{C}$		70		ns
I <sub>RM</sub>	$V_R = 100 \text{ V}; I_F = 100 \text{ A}; -di_F/dt 200 \text{ A/}\mu\text{s} T_{VJ} = 25^{\circ}\text{C}$		7.5		Α

<sup>\*</sup> Data according to assembled Chip on substrate

Data according to IEC 60747

# Terms of Conditions and Usage

The data contained in this product data sheet is exclusively intended for technically trained staff. The user will have to evaluate the suitability of the product for the intended application and the completeness of the product data with respect to his application. The specifications of our components may not be considered as an assurance of component characteristics. Should you require product information in excess of the data given in this product data sheet or which concerns the specific application of our product, please contact the sales office, which is responsible for you. Due to technical requirements our product may contain dangerous substances. For any information on the types in question please contact the sales office/partner, which is responsible for you.

Should you intend to use the product in aviation applications, in health or life endangering or life support applications, please notify. For any such applications we urgently recommend

- 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.