

Platin FRED tentative

Туре	Ag [*] Al [*]	V_{RRM} [∨]	<i>I_F</i> [A]	Chip S		Package
DMLP 10		200	30	3.30	3.30	sawn on foil ✓ unsawn wafer ✓* in waffle pack ✓
	*Frontside options		!	Į.		Please contact XYS chip sales

Mechanical Parameters

Area active 8.41 mm² Area total 10.89 mm² Wafer size Ø 150 mm **Thickness** 250 μm Si Material Max. possible chips per wafer 1229 Polyimide Passivation front side Metallization top side bondable: Αl solderable (only): AI / Ti / Ni / Ag* Metallization backside Recom. wire bonds (AI) Anode Number 3 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 waffle pack in org. container, in dry nitrogen < 2 year -40 ... 40 °C

Features:

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

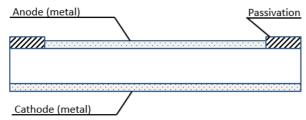
Applications

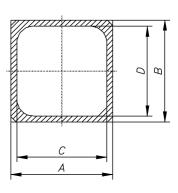
- Antiparallel diode for high frequency switching devices
- Antisaturation diode
- Snubber diode
- Free wheeling diode in converters and motor control circuits
- Rectifiers in switch mode power supplies (SMPS)
- Inductive heating
- Uninterruptible power supplies (UPS)
- Ultrasonic cleaners and welders
- PDP

*Sinterable top/bottom side on request

Dimensions

Α	В	С	D	
[mm]	[mm]	[mm]	[mm]	
3.30	3.30	2.90	2.90	







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Symbol	Conditions		Dotings		
Symbol	Conditions	1 -	Ratings		
		min.	typ.	max.	
I _R	$V = V_R = V_{RRM} T_{VJ} = 25^{\circ}C$			1	μΑ
	$T_{VJ} = ^{\circ}C$			200	μΑ
V _F	$I_F = 30 \text{ A}$ $T_{VJ} = 25^{\circ}\text{C}$		40	1.05	V
	T _{vJ} = 150°C	-		0.83	V
V _{F0}	For power-loss calculations only				V
r _F	T _{vJ} 175°C				$m\Omega$
T _{VJ}		-40	7	175	°C
I _{F(AV)} *	$T_c = 125 ^{\circ}\text{C}$ 180° rect. $T_{VJ} = 175 ^{\circ}\text{C}$	X/\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\			Α
I _{FSM} *	$T_{VJ} = 45^{\circ}C$ $t = 10$ ms (50 Hz), sine			390	Α
	$V_{R} = 0 \text{ V}$ $t = 8.3 \text{ ms } (60 \text{ Hz}), \text{ sine}$				Α
	$T_{VJ} = 175 ^{\circ}\text{C}$ $t = 10 \text{ms}$ (50 Hz), sine				Α
	$V_R = 0 V$ $t = 8.3 \text{ ms } (60 \text{ Hz}), \text{ sine}$	· •			Α
<i>f²t</i> *	$T_{VJ} = 45^{\circ}C$ $t = 10$ ms (50 Hz), sine			760	A^2s
	$V_R = 0 V$ $t = 8.3 \text{ ms } (60 \text{ Hz}), \text{ sine}$			tbd	A ² s
	$T_{VJ} = 175 ^{\circ}\text{C}$ $t = 10 \text{ms} (50 \text{Hz}), \text{ sine}$			tbd	A 2s
	$V_{R} = 0 V$ $t = 8.3 \text{ ms } (60 \text{ Hz}), \text{ sine}$			tbd	A ² s
E _{AS} *	$I_{AS} = 9 \text{ A}$; L = 100 μH ; $T_{VJ} = 25^{\circ}\text{C}$; non repetitive			4	mJ
I _{AR} *	$V_A = 1.5 \cdot V_{RRM}$ typ.; f = 10 kHz; repetitive			tbd	Α
R _{thJC} *	DC current			1.35	K/W
t,,	$V_R = 100 \text{ V}$; $I_F = 30 \text{ A}$; $-di_E/dt = 200 \text{ A/}\mu\text{s}$ $T_{VJ} = 25^{\circ}\text{C}$		30		ns
I _{RM}	$V_R = 100 \text{ V}$; $I_F = 30 \text{ A}$; $-di_F/dt = 200 \text{ A/}\mu\text{s}$ $T_{VJ} = 25^{\circ}\text{C}$		3		Α

^{*} Data according to assembled Chip

Data according to IEC 60747

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- to establish joint measures to ensure application specific product capabilities and notify that IXYS may delivery dependent on the realization of any such measures.