

Type	Ag* Al*	V _{RRM} [V]	I _F [A]	Chip Size [mm] x [mm]	Package
DWEP 12	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	600	5	2.4 2.4	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	2.09	mm ²
Area total	5.76	mm ²
Wafer size Ø	150	mm
Thickness	365	µm
Material	Si	
Max. possible chips per wafer	tbd	
Passivation front side	glass	
Metallization top side	bondable or solderable	
Metallization backside	solderable (only)Al / Ti / Ni / Ag	
Recom. wire bonds (Al)	Anode	Number 1
		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

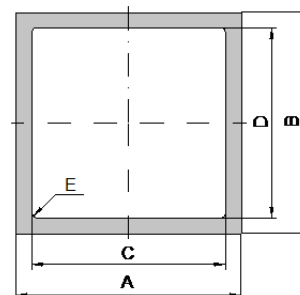
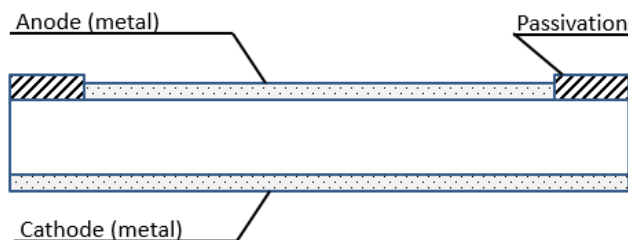
- Anode top
- Glassivated
- Au doped
- Planar surface
- Epitaxial diode

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
[mm]	[mm]	[mm]	[mm]	[mm]
2.4	2.4	1.46	1.46	0.23



Electrical parameters

Symbol	Conditions	Ratings		
		min.	typ.	max.
I_R	$V = V_{RRM}$ $T_{VJ} = 25^\circ\text{C}$			10 μA
	$V = 0.8 \cdot V_{RRM}$ $T_{VJ} = 125^\circ\text{C}$			1.5 mA
V_F	$I_F = 8 \text{ A}$ $T_{VJ} = 25^\circ\text{C}$			1.45 V
	$T_{VJ} = 150^\circ\text{C}$			1.31 V
V_{FO} *	For power-loss calculations only			tbd V
r_F *	$T_{VJ} = 150^\circ\text{C}$			tbd $\text{m}\Omega$
T_{VJ}		-55		150 $^\circ\text{C}$
$I_{F(AV)}$ *	$T_C = 100^\circ\text{C}$ 180° rect. $T_{VJ} = 150^\circ\text{C}$			5 A
I_{FSM} *	$T_{VJ} = 45^\circ\text{C}$ $t = 10 \text{ ms}$ (50 Hz), sine $V_R = 0 \text{ V}$			tbd A
R_{thJC} *	DC current			tbd K/W
t_T *	$V_R = \text{ V}; I_F = \text{ A}; -di_F/dt = \text{ A}/\mu\text{s}$ $T_{VJ} = 25^\circ\text{C}$			ns
I_{RM}	$V_R = 100 \text{ V}; I_F = 25 \text{ A}; -di_F/dt = 100 \text{ A}/\mu\text{s}$ $T_{VJ} = 25^\circ\text{C}$			5 A

* Data according to assembled Chip

Data according to IEC 60747

Terms of Conditions and Usage

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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.