

Type	Ag* Al*	V <sub>RRM</sub> [V]	I <sub>F</sub> [A]	Chip Size [mm] x [mm]	Package
DWEP 29	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	1200	50	6.20 6.20	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	27.01 mm <sup>2</sup>
Area total	38.44 mm <sup>2</sup>
Wafer size Ø	150 mm
Thickness	425 µm
Material	Si
Max. possible chips per wafer	386
Passivation front side	glass
Metallization top side	bondable or solderable
Metallization backside	solderable (only)Al / Ti / Ni / Ag
Recom. wire bonds (Al)	Anode Number 12*
* Stitch bonds	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 <sub>stg</sub>	-40 ... 40 °C

### Features

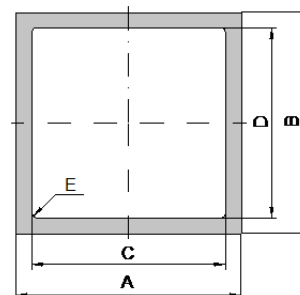
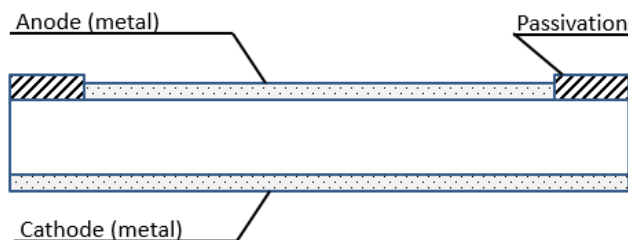
- Anode top
- Glassivated
- Au doped
- Planar surface
- Epitaxial diode

### 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]
6.20	6.20	5.20	5.20	0.20



## Electrical parameters

Symbol	Conditions	Ratings		
		min.	typ.	max.
$I_R$	$V = V_{RRM}$ $T_{VJ} = 25^\circ\text{C}$			200 $\mu\text{A}$
	$V = 0.8 \cdot V_{RRM}$ $T_{VJ} = 125^\circ\text{C}$			14 $\text{mA}$
$V_F$	$I_F = 60 \text{ A}$ $T_{VJ} = 25^\circ\text{C}$			2.35 $\text{V}$
	$T_{VJ} = 150^\circ\text{C}$			1.94 $\text{V}$
$V_{FO}$ *	For power-loss calculations only			tbd $\text{V}$
$r_F$ *	$T_{VJ} = 150^\circ\text{C}$			tbd $\text{m}\Omega$
$T_{VJ}$		-55		150 $^\circ\text{C}$
$I_{F(AV)}$ *	$T_C = \quad ^\circ\text{C}$ 180° rect. $T_{VJ} = 150^\circ\text{C}$			50 $\text{A}$
$I_{FSM}$ *	$T_{VJ} = 45^\circ\text{C}$ $t = 10 \text{ ms}$ (50 Hz), sine $V_R = 0 \text{ V}$			tbd $\text{A}$
$R_{thJC}$ *	DC current			tbd $\text{K/W}$
$t_T$ *	$V_R = 100 \text{ V};$ $I_F = 100 \text{ A};$ $-di_F/dt = 100 \text{ A}/\mu\text{s}$ $T_{VJ} = 25^\circ\text{C}$		220	ns
$I_{RM}$	$V_R = 100 \text{ V};$ $I_F = 100 \text{ A};$ $-di_F/dt = 100 \text{ A}/\mu\text{s}$ $T_{VJ} = 25^\circ\text{C}$			7 $\text{A}$

\* 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.