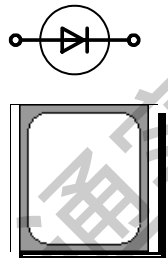


Type	Ag* Al*	V <sub>RRM</sub> [V]	I <sub>F</sub> [A]	Chip Size [mm] x [mm]	Package
DWEP 77	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	200	100	8.91 7.22	sawn on foil <input checked="" type="checkbox"/> unsawn wafer <input checked="" type="checkbox"/> * in waffle pack <input checked="" type="checkbox"/>

\*Frontside options

\*Please contact IXYS chip sales

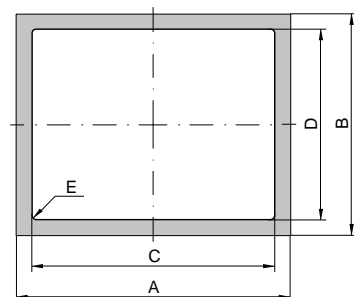
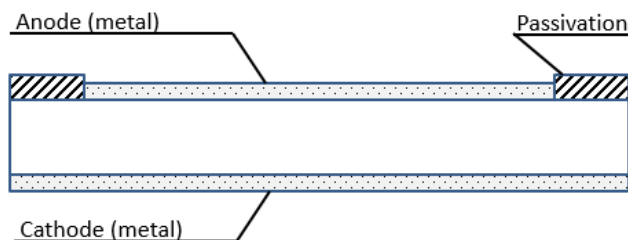


### Mechanical Parameters

Area active	49.03	mm <sup>2</sup>	<b>Features</b> <ul style="list-style-type: none"> <li>• Anode top</li> <li>• Glassivated</li> <li>• Au doped</li> <li>• Planar surface</li> <li>• Epitaxial diode</li> </ul> <b>Applications</b> <ul style="list-style-type: none"> <li>• Antiparallel diode for high frequency switching devices</li> <li>• Antisaturation diode</li> <li>• Snubber diode</li> <li>• Free wheeling diode in converters and motor control circuits</li> <li>• Rectifiers in switch mode power supplies (SMPS)</li> <li>• Inductive heating</li> <li>• Uninterruptible power supplies (UPS)</li> <li>• Ultrasonic cleaners and welders</li> <li>• PDP</li> </ul>
Area total	64.33	mm <sup>2</sup>	
Wafer size Ø	150	mm	
Thickness	340	µm	
Material	Si		
Max. possible chips per wafer	220		
Passivation front side	glass		
Metallization top side	bondable or solderable		
Metallization backside	solderable (only)Al / Ti / Ni / Ag		
Recom. wire bonds (Al)	Anode	Number 18*	
* 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	

### Dimensions

A	B	C	D	E
[mm]	[mm]	[mm]	[mm]	[mm]
8.91	7.22	7.91	6.22	0.20



## Electrical parameters

Symbol	Conditions	Ratings		
		min.	typ.	max.
$I_R$	$V = V_{RRM}$ $T_{VJ} = 25^\circ\text{C}$			60 $\mu\text{A}$
	$V = 0.8 \cdot V_{RRM}$ $T_{VJ} = 125^\circ\text{C}$			20 $\text{mA}$
$V_F$	$I_F = 100 \text{ A}$ $T_{VJ} = 25^\circ\text{C}$			0.98 $\text{V}$
	$T_{VJ} = 150^\circ\text{C}$			0.81 $\text{V}$
$V_{FO}$ *	For power-loss calculations only			tbd $\text{V}$
$r_F$ *	$T_{VJ} = 150^\circ\text{C}$			tbd $\text{m}\Omega$
$T_{VJ}$		-55		150 $^\circ\text{C}$
$I_{F(AV)}$ *	$T_C = 100^\circ\text{C}$ 180° rect. $T_{VJ} = 150^\circ\text{C}$			100 $\text{A}$
$I_{FSM}$ *	$T_{VJ} = 45^\circ\text{C}$ $t = 10 \text{ ms}$ (50 Hz), sine $V_R = 0 \text{ V}$			1000 $\text{A}$
$R_{thJC}$ *	DC current			0.4 $\text{K/W}$
$t_T$ *	$V_R = 100 \text{ V}; I_F = 100 \text{ A}; -di_F/dt = 200 \text{ A}/\mu\text{s}$ $T_{VJ} = 25^\circ\text{C}$		60	ns
$I_{RM}$	$V_R = 100 \text{ V}; I_F = 100 \text{ A}; -di_F/dt = 200 \text{ A}/\mu\text{s}$ $T_{VJ} = 25^\circ\text{C}$			7.5 $\text{A}$

\* Data according to assembled Chip DSEI 120

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.