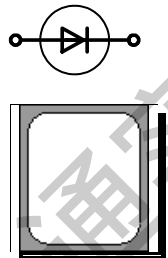


Type	Ag* Al*	V _{RRM} [V]	I _F [A]	Chip Size [mm] x [mm]	Package
DWEP 55	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	600	75	8.65 4.95	sawn on foil <input checked="" type="checkbox"/> unsawn wafer <input checked="" type="checkbox"/> * in waffle pack <input checked="" type="checkbox"/>

*Frontside options

*Please contact IXYS chip sales

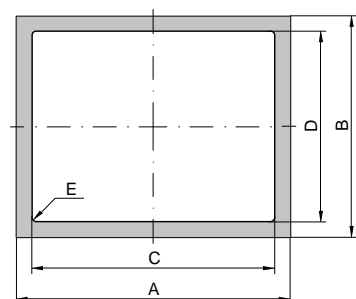
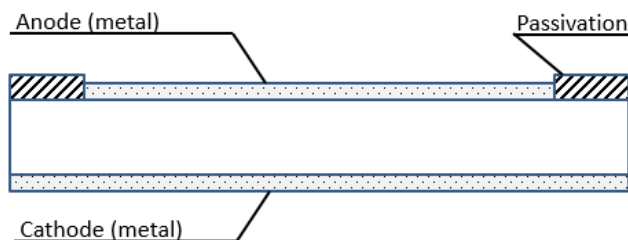


Mechanical Parameters

Area active	30.05	mm ²	Features <ul style="list-style-type: none"> • Anode top • Glassivated • Au doped • Planar surface • Epitaxial diode Applications <ul style="list-style-type: none"> • 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
Area total	42.82	mm ²	
Wafer size Ø	150	mm	
Thickness	365	µm	
Material	Si		
Max. possible chips per wafer	342		
Passivation front side	glass		
Metallization top side	bondable or solderable		
Metallization backside	solderable (only)Al / Ti / Ni / Ag		
Recom. wire bonds (Al)	Anode	Number 9	
		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	

Dimensions

A	B	C	D	E
[mm]	[mm]	[mm]	[mm]	[mm]
8.65	4.95	7.65	3.95	0.20



Electrical parameters

Symbol	Conditions	Ratings		
		min.	typ.	max.
I_R	$V = V_{RRM}$ $T_{VJ} = 25^\circ\text{C}$			60 μA
	$V = 0.8 \cdot V_{RRM}$ $T_{VJ} = 125^\circ\text{C}$			17 mA
V_F	$I_F = 75 \text{ A}$ $T_{VJ} = 25^\circ\text{C}$			1.58 V
	$T_{VJ} = 125^\circ\text{C}$			1.38 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. $T_{VJ} = 150^\circ\text{C}$			75 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			0.7 K/W
t_T *	$V_R = 30 \text{ V}; I_F = 1 \text{ A}; -di_F/dt = 200 \text{ A}/\mu\text{s}$ $T_{VJ} = 25^\circ\text{C}$		35	ns
I_{RM}	$V_R = 100 \text{ V}; I_F = 100 \text{ A}; -di_F/dt = 100 \text{ A}/\mu\text{s}$ $T_{VJ} = 25^\circ\text{C}$			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.