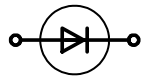



Type	Ag* Al*	V _{RRM} [V]	I _F [A]	Chip Size [mm] x [mm]	Package
DWEP 25	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	600	30	4.45 4.45	sawn on foil <input checked="" type="checkbox"/> unsawn wafer <input checked="" type="checkbox"/> * in waffle pack <input checked="" type="checkbox"/>
*Frontside options		*Please contact IXYS chip sales			

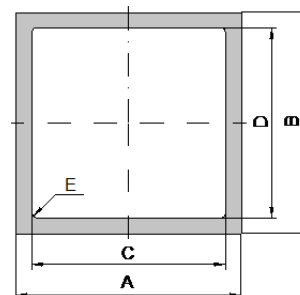
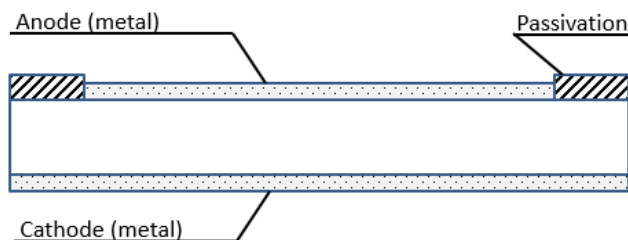



Mechanical Parameters

Area active	13.25 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	19.80 mm ²	
Wafer size Ø	150 mm	
Thickness	365 µm	
Material	Si	
Max. possible chips per wafer	764	
Passivation front side	glass	
Metallization top side	bondable or solderable	
Metallization backside	solderable (only)Al / Ti / Ni / Ag	
Recom. wire bonds (Al)	Anode Number 4 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]
4.45	4.45	3.45	3.45	0.20



Electrical parameters

Symbol	Conditions	Ratings		
		min.	typ.	max.
I_R	$V = V_{RRM}$ $T_{VJ} = 25^\circ\text{C}$			30 μA
	$V = 0.8 \cdot V_{RRM}$ $T_{VJ} = 125^\circ\text{C}$			7 mA
V_F	$I_F = 43 \text{ A}$ $T_{VJ} = 25^\circ\text{C}$			1.53 V
	$T_{VJ} = 150^\circ\text{C}$			1.38 V
V_{FO} *	For power-loss calculations only			0.85 V
r_F *	$T_{VJ} = 150^\circ\text{C}$			13 $\text{m}\Omega$
T_{VJ}		-55		150 $^\circ\text{C}$
$I_{F(AV)}$ *	$T_C = 100^\circ\text{C}$ 180° rect. $T_{VJ} = 150^\circ\text{C}$			30 A
I_{FSM} *	$T_{VJ} = 45^\circ\text{C}$ $t = 10 \text{ ms}$ (50 Hz), sine $V_R = 0 \text{ V}$			250 A
R_{thJC} *	DC current			0.9 K/W
t_T *	$V_R = 100 \text{ V};$ $I_F = 50 \text{ A};$ $-di_F/dt = 100 \text{ A}/\mu\text{s}$ $T_{VJ} = 25^\circ\text{C}$		90	ns
I_{RM}	$V_R = 100 \text{ V};$ $I_F = 50 \text{ A};$ $-di_F/dt = 100 \text{ A}/\mu\text{s}$ $T_{VJ} = 25^\circ\text{C}$		3	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.