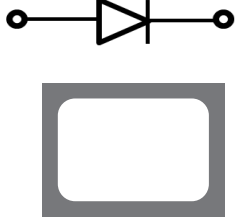


Type	$V_{RRM}$ [V]	$I_{F(AV)}$ [A]	Chip Size [mm] x [mm]	Package	
<b>DSHP 63-18</b>	1800	93	8,91    7,22	sawn on foil	<input checked="" type="checkbox"/>
				unsawn wafer	<input checked="" type="checkbox"/> *
				in waffle pack	<input checked="" type="checkbox"/>



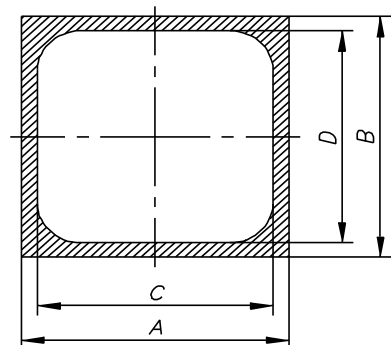
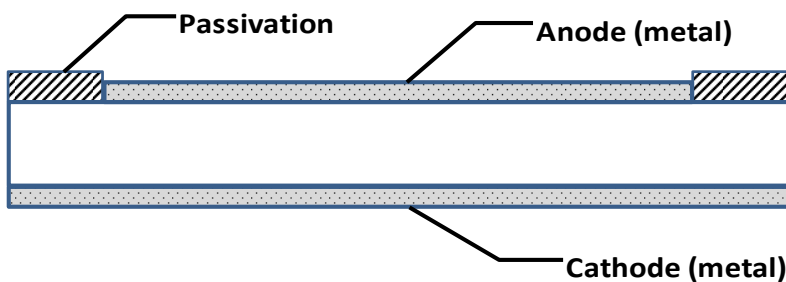
\*Please Contact  
IXYS Chip Sales

## Mechanical Parameters

Area active		42,30 mm <sup>2</sup>	<p><b>Features</b></p> <ul style="list-style-type: none"> <li>● fast, soft SONIC diode</li> <li>● low forward voltage drop</li> <li>● small temp. Coefficient</li> <li>● low switching losses</li> <li>● high ruggedness</li> <li>● anode top</li> <li>● Tvjm = 175°C</li> </ul> <p><b>Applications</b></p> <ul style="list-style-type: none"> <li>● antiparallel diode for high frequency switching</li> <li>● antisaturation diode</li> <li>● snubber diode</li> <li>● freewheeling diode in converters &amp; motor control</li> <li>● rectifiers in switch mode power supplies (SMPS)</li> <li>● inductive heating &amp; melting</li> <li>● uninterruptible power supplies (UPS)</li> <li>● ultrasonic cleaners &amp; welders</li> </ul>
Area total		64,33 mm <sup>2</sup>	
Wafer size $\varnothing$		150 mm	
Thickness		290 $\mu$ m	
Die Per Wafer		220	
Material		Si	
Passivation front side		Polyimide	
Metalisation front side		Al	
Metalisation back side		Al/Ti/NiV/Ag	
Recom. wire bonds (Al)		8	
*= stitch bonds		380 $\mu$ m	
Reject ink dot size		0.4 - 1.0 mm	
Recom. solder temp.		<300 °C	
Recom. Storage environment		<6 month	
	sawn on foil	in org. container, in dry nitrogen	
	unsawn wafer	in org. container, in dry nitrogen	
	in waffle pack	in org. container, in dry nitrogen	
Storage temp.		-40...40 °C	

## Dimensions

A	B	C	D
[mm]	[mm]	[mm]	[mm]
8,91	7,22	7,37	5,56



## Electrical Parameters

Symbol	Conditions	Ratings			Units
		min	typ	max	
$I_R$	$V = V_{RRM}$	$T_{vj} = 25\text{ °C}$		100	$\mu\text{A}$
		$T_{vj} = 150\text{ °C}$	2,2		$\text{mA}$
$V_F$	$I_f = 100\text{ A}$	$T_{vj} = 25\text{ °C}$	1,90	2,20	$\text{V}$
		$T_{vj} = 150\text{ °C}$	2,00		$\text{V}$
$V_{FO}$	For power loss calculations only			1,3	$\text{V}$
$r_F$		$T_{vj} = 175\text{ °C}$		9,5	$\text{m}\Omega$
$T_{VJ}$				-55	$\text{°C}$
$I_{F(AV)}$ *	DC	$T_c = 80\text{ °C}$	93		$\text{A}$
$I_{FSM}$ *	$V = 0\text{V}$	$T_{vj} = 45\text{ °C}$		700	$\text{A}$
$R_{thJC}$ *	DC current			0,47	$\text{K/W}$
$Q_{rr}$					$\mu\text{C}$
$I_{RM}$	$V = 900\text{ V}$	$T_{vj} = 25\text{ °C}$			$\text{A}$
		$dI_f/dt = 2500\text{ A}/\mu\text{s}$			
$t_{rr}$	$I_f = 100\text{ A}$				$\text{ns}$
$E_{rec}$					$\text{mJ}$
$Q_{rr}$	$V = 900\text{ V}$	$T_{vj} = 150\text{ °C}$	30		$\mu\text{C}$
		$dI_f/dt = 2500\text{ A}/\mu\text{s}$	160		$\text{A}$
$t_{rr}$	$I_f = 100\text{ A}$		200		$\text{ns}$
$E_{rec}$			11		$\text{mJ}$

 \* Data according to assembled 380 $\mu\text{m}$  DCB

Data according to IEC 60747

## Terms of Conditions & Usage

The data contained in this product datasheet is exclusively intended for technically trained staff. The user will have to evaluate the suitability of the product for the intended application and the completeness of the product data with respect to his application. The specifications of our components may not be considered as an assurance of component characteristics. Should you require product information in excess of the data given in this product datasheet or which concerns the specific application of our product, please contact the sales office, which is responsible for you. Due to technical requirements our product may contain dangerous substances. For any information on the types in question please contact the sales office/partner, which is responsible for you.

Should you intend to use the product in aviation applications, in life or health endangering or life support applications, please notify. For any such applications we urgently recommend

- to perform joint risks and quality assessments;
- the conclusion of quality agreements;
- to establish joint measures to ensure application specific product capabilities and notify that IXYS may deliver dependant on the realisation of any such measures.