

$V_{RRM} = 1200 \text{ V}$

$I_F = 100 \text{ A}$



**Diode-Die**

**5SLX12H1200**

**Die size: 9.24 x 9.24 mm**

Doc. No. 5SYA1651-02 Aug 02

- Fast Recovery, Low losses
- Soft reverse recovery
- High ruggedness

### Maximum Rated Values

( $T_j = 25^\circ\text{C}$ , unless specified otherwise)

Parameter	Symbol	Conditions	Values	Unit
Maximum Reverse Voltage	$V_{RRM}$		1200	V
DC Forward Current	$I_F$		100	A
Maximum Forward Current	$I_{FM}$	Limited by $T_{jmax}$	200	A
Operating Temperature	$T_j$		-40 .. +150	$^\circ\text{C}$

### Characteristic Values

( $T_j = 25^\circ\text{C}$ , unless specified otherwise)

Parameter	Symbol	Conditions	min.	typ.	max.	Unit	
Forward Voltage	$V_F$	$I_F = 100 \text{ A}$	$T_j = 25^\circ\text{C}$	1.7	1.9	2.3	V
			$T_j = 125^\circ\text{C}$		1.9		V
Reverse leakage current	$I_R$	$V_R = 1200 \text{ V}$	$T_j = 25^\circ\text{C}$			100	$\mu\text{A}$
			$T_j = 125^\circ\text{C}$		1.2		mA
Reverse recovery current	$I_{rrm}$	$I_F = 100 \text{ A}, V_{CC} = 600 \text{ V},$ $di/dt = 1600 \text{ A}/\mu\text{s}, L_\sigma = 50 \text{ nH},$ $T_j = 125^\circ\text{C},$ Inductive load, Switch : 5SMX12L1251		70		A	
Reverse recovery charge	$Q_{rr}$			18		$\mu\text{C}$	
Reverse recovery time	$t_{rr}$			400		ns	
Reverse recovery energy	$E_{rec}$			6.5		mJ	

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**Mechanical Characteristics**

Parameter				Unit
Dimensions	Overall die	L x W	9.24 x 9.24	mm
	Exposed Front metal	L x W	7.6 x 7.6	mm
	Thickness		325 ± 15	µm
Metallization	Front	AlSi1	4.2	µm
	Back <sup>1)</sup>	Al / Ti / Ni / Ag	1.2	µm

<sup>1)</sup> For assembly instructions refer to : IGBT and Diode chips from ABB Switzerland Ltd, Semiconductors, Doc. No. 5SYA2033-01 April 02.

**Outline Drawing**

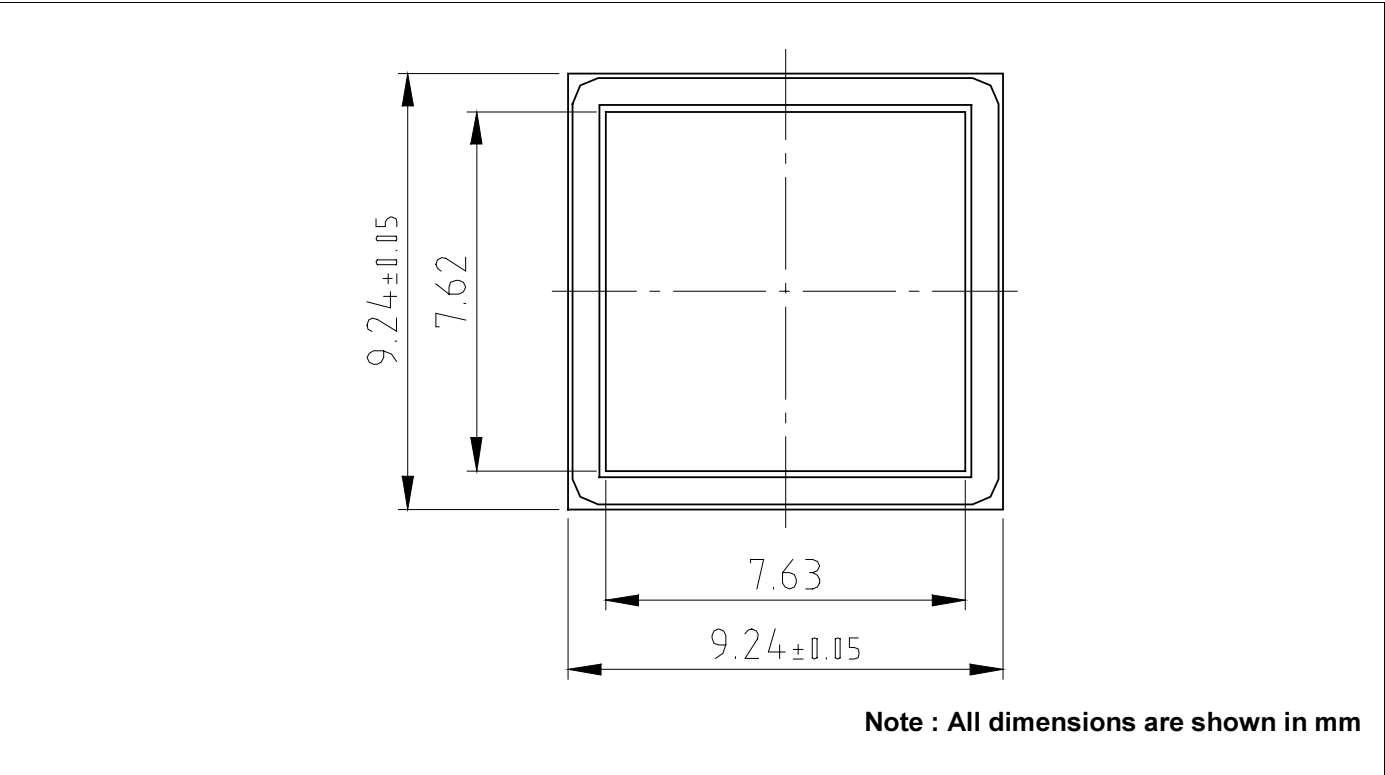


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**ABB Switzerland Ltd**  
**Semiconductors**  
 Fabrikstrasse 3  
 CH-5600 Lenzburg, Switzerland

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Telephone +41 (0)58 586 1419  
 Fax +41 (0)58 586 1306  
 Email abbsem@ch.abb.com  
 Internet www.abbsem.com