

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

$$I_F = 75 \text{ A}$$

Diode-Die

5SLX12F1200



Die size: 7.8 x 7.8 mm

Doc. No. 5SYA1652-02 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		75	A
Maximum Forward Current	I_{FM}	Limited by T_{jmax}	150	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	$I_F = 75 \text{ A}$	$T_j = 25^\circ\text{C}$	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	μA
			$T_j = 125^\circ\text{C}$		1		mA
Reverse recovery current	I_{rrm}	$I_F = 75 \text{ A}, V_{CC} = 600 \text{ V},$ $di/dt = 1200 \text{ A}/\mu\text{s}, L_\sigma = 50 \text{ nH},$ $T_j = 125^\circ\text{C},$ Inductive load, Switch : 5SMX12K1250		55		A	
Reverse recovery charge	Q_{rr}			13		μC	
Reverse recovery time	t_{rr}			400		ns	
Reverse recovery energy	E_{rec}			4		mJ	

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Mechanical Characteristics

Parameter				Unit
Dimensions	Overall die	L x W	7.8 x 7.8	mm
	Exposed Front metal	L x W	6.2 x 6.2	mm
	Thickness		325 ± 15	µm
Metallization	Front	AlSi1	4.2	µm
	Back ¹⁾	Al / Ti / Ni / Ag	1.2	µm

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

Outline Drawing

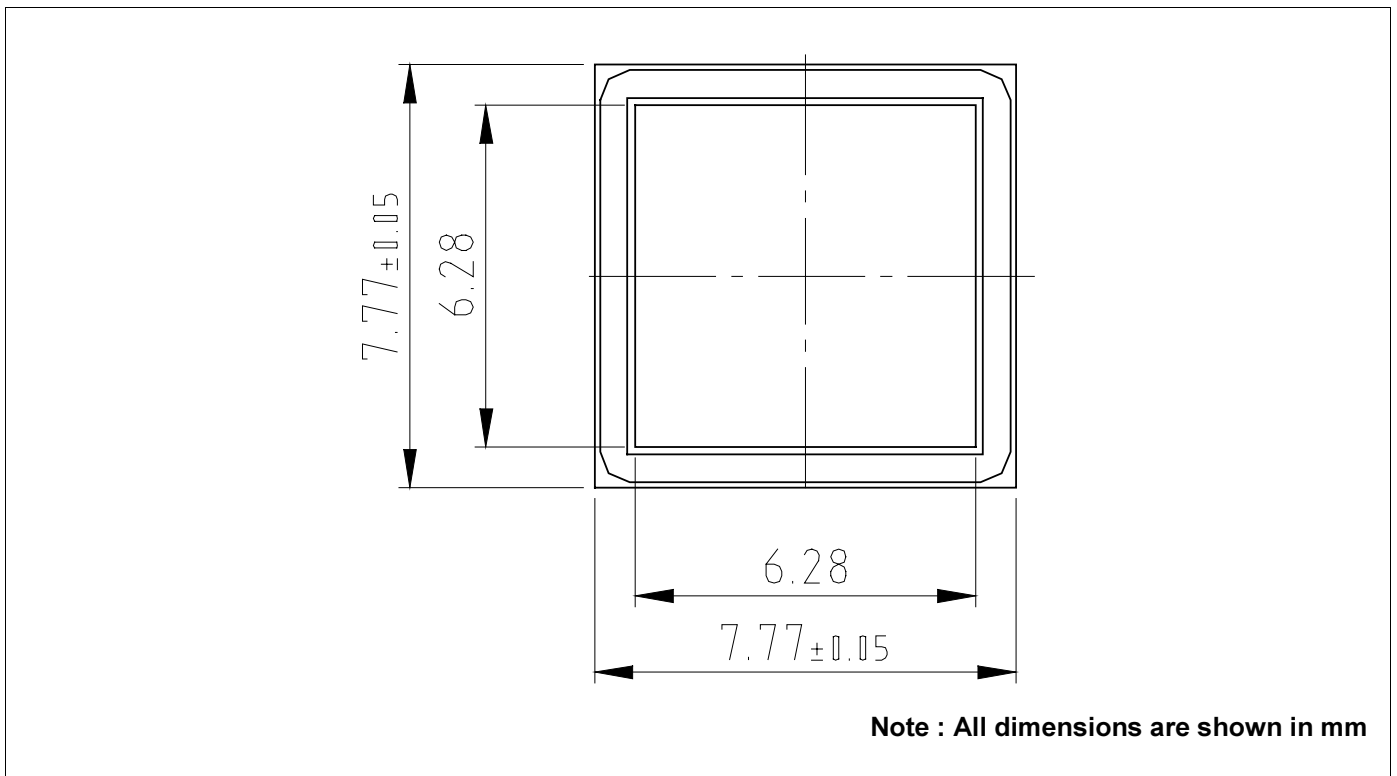


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