

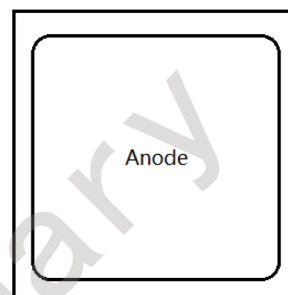
GSD10120

1200V Silicon Carbide Schottky Diode



Features

- Negligible reverse recovery
- High surge current
- Positive temperature coefficient
- Higher frequency
- Halogen-free / RoHS compliant



Applications

- SMPS
- Solar inverter
- Data Center
- UPS

Benefits

- High-speed switching
- Low heat dissipation requirements
- Reduce size and cost of the system
- High-reliability

Die Information

Wafer Size	150 mm
Die Size	2336 × 2336 μm^2 (exclude SL)
Scribe Line Size	80 μm
Die Thickness	175 μm
Anode Pad Opening Size;	1946 × 1946 μm^2
Gross Die	2734 ea
Top Metallization	Al, 4 μm
Back Metallization	Ti/Ni/Ag, 2.5 μm
Frontside Passivation	Polyimide
Wire Bond	Al, 15mil×2 (recommend)

GSD10120

1200V Silicon Carbide Schottky Diode

Electrical Characteristics (Wafer Type)

Maximum Ratings^{*2} (Tc=25°C unless otherwise noted)

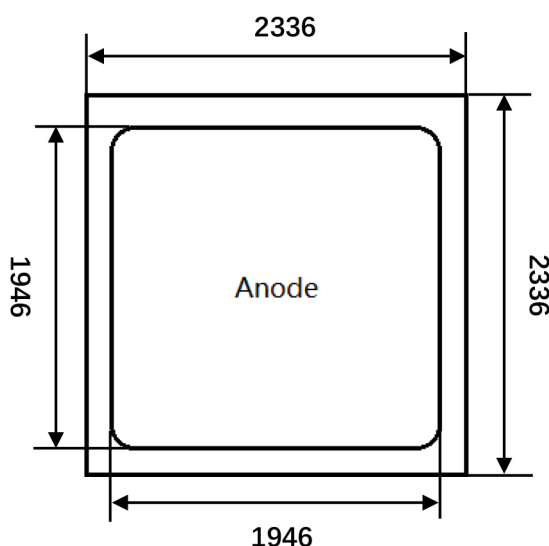
Symbol	Parameter		Value	Unit
V_{RRM}	Repetitive peak reverse voltage		1200	V
I_F	Continuous forward current	Tc=161°C	10	A
I_{FSM}	Non-repetitive forward surge current	$t_p=10ms$, Half sine pulse	64	A
I_{FRM}	Repetitive Peak Forward Surge Current	$t_p=10ms$, Half sine pulse	55	A

*2. Based on TO-220-2 package

Static Electrical Characteristics (Tc=25°C unless otherwise noted)

Symbol	Parameter	Test Conditions	Value			Unit
			Min.	Typ.	Max.	
V_R	Reverse blocking voltage	$I_R=200\mu A$	1200	-	-	V
I_R	Reverse current	$V_R=1200V$	-	2.00	60	μA
V_F	Forward voltage	$I_F=5A$	-	1.20	-	V
		$I_F=10A$	-	1.44	1.70	V

Die Layout (Unit : μm)



GSD10120

1200V Silicon Carbide Schottky Diode

Announcement

Information in this document is believed to be accurate and reliable. However, GLOSIC does not give any representations or warranties, expressed or implied, as to the accuracy or completeness of such information and shall have no liability for the consequences of use of such information.

Right to Make Changes

GLOSIC reserves the right to make changes to information published in this document, including without limitation specifications and product descriptions, at any time and without notice. This document supersedes and replaces all information supplied prior to the publication hereof.

The datasheet with “REV.” + “Arabic numerals” is based on engineering data for initial reference purpose only.

The released datasheet would be issued with “REV.” + “alphabet characters”.



www.globalsic.com.cn