

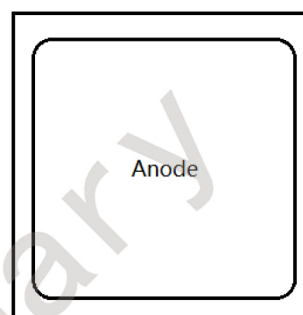
GSD10060

650V Silicon Carbide Schottky Diode



Features

- Negligible reverse recovery
- High-speed switching
- Positive Temperature Coefficient
- Temperature-Independent Switching
- Halogen-free / RoHS compliant



Applications

- Switch mode power supply
- Solar inverter
- Data Center
- Uninterruptible power supply

Benefits

- ◆ Higher frequency
- ◆ Low heat dissipation requirements
- ◆ Reduce size and cost of the system
- ◆ High-reliability

Die Information

Wafer Size	150 mm
Die Size	1820 × 1820 μm^2 (exclude SL)
Scribe Line Size	80 μm
Die Thickness	175 μm
Anode Pad Opening Size;	1620 × 1620 μm^2
Gross Die	4410 ea
Top Metallization	Al
Back Metallization	Ti/Ni/Ag
Frontside Passivation	Polyimide
Wire Bond	Al, 15mil×1 (recommend)

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Electrical Characteristics (Wafer Type)

Maximum Ratings*² (T_c=25°C unless otherwise noted)

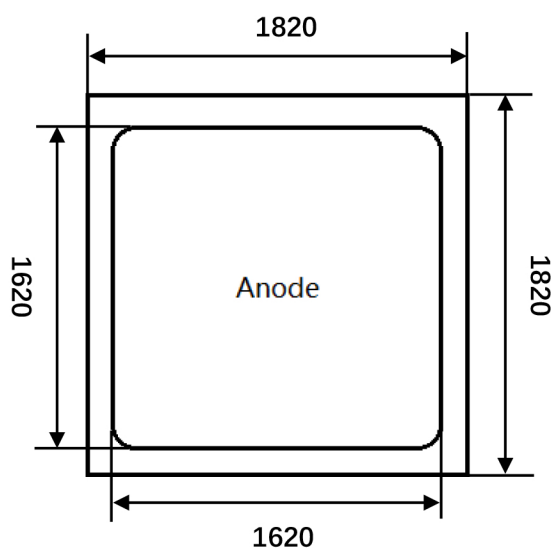
Symbol	Parameter		Value	Unit
V _{RRM}	Repetitive peak reverse voltage		650	V
I _F	Continuous forward current	T _c =154°C	10	A
I _{FSM}	Non-repetitive forward surge current	t _p =10ms, Half sine pulse	96	A
I _{FRM}	Repetitive Peak Forward Surge Current	t _p =10ms, Half sine pulse	85	A

*2 Based on TO-220-2 package

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

Symbol	Parameter	Test Conditions	Value			Unit
			Min.	Typ.	Max.	
V _R	Reverse blocking voltage	I _R =50uA	650	-	-	V
I _R	Reverse current	V _R =650V	-	5	60	uA
V _F	Forward voltage	I _F =5A	-	1.17	-	V
		I _F =10A	-	1.38	1.6	V

Die Layout (Unit : um)



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Announcement

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