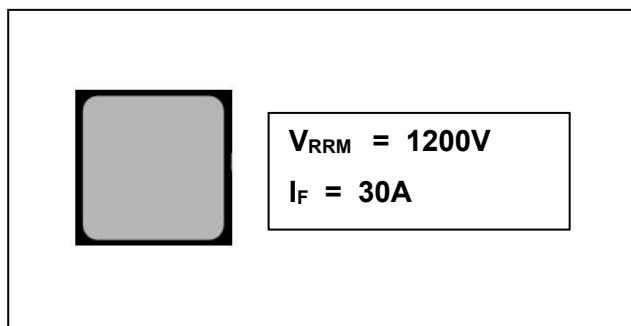


SD4-1200-S030AB

SiC Schottky Power Rectifier Chip



Description

- 1200-Volt Schottky Rectifier
- Zero Reverse Recovery
- Zero Forward Recovery
- High-Frequency Operation
- Temperature-Independent Switching Behavior
- Extremely Fast Switching
- Positive Temperature Coefficient on VF

Part Number	Die Size	Anode	Cathode
SD4-1200-S030AB	Please contact your sales representative to get the detailed information about die layout and dimensions.	Al	Ag

Maximum Ratings:

Parameter	Symbol	Value	Units
Repetitive Peak Reverse Voltage	V_{RRM}	1200	V
Surge Peak Reverse Voltage	V_{RSM}	1200	V
DC Peak Blocking Voltage	V_R	1200	V
Maximum DC Current	I_F	30	A
Non-Repetitive Forward Surge Current	I_{FSM}	300	A
Operating Junction and Storage Temperature	T_J, T_{stg}	-55 to +175	°C
Maximum Processing Temperature	T_{Proc}	325	°C

Technical Data
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Electrical Characteristics(T=25°C unless otherwise specified):

Parameter	Symbol	Condition	Typ.	Max.	Units
DC Forward Voltage	V _F	I _F = 30A, T _J =25°C	1.5	1.8	V
		I _F = 30A, T _J =175°C	1.9	2.5	V
Reverse Current	I _R	V _R = 1200 V, T _J =25°C	1	20	uA
		V _R = 1200 V, T _J =175°C	5	200	uA
Junction Capacitance	C _T	V _R =0V, T _J =25°C, f=1MHz	2581	-	C _T
Reverse Recovery Charge	Q _c	I _F = 30A, di/dt = 200A/μs V _R = 800 V, T _J =25°C	152	-	Q _c
Capacitance Stored Energy	E _c	V _R = 800 V, T _J =25°C	44	-	E _c

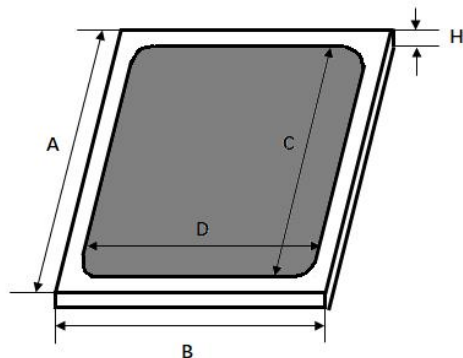
* Pulse width < 300 μs, duty cycle < 2%

Mechanical Parameters:

Parameter	Typ.	Unit
Die Size	4.20×4.20	mm
Anode Pad opening	3.50×3.50	mm
Thickness	350±10%	μm
Wafer Size	152.4	mm
Anode Metalization (Al)	4	μm
Cathode Metalization (Ag)	0.4	μm
Frontside Passivation	Polyimide	

Technical Data
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Dimension



symbol	Dimension +/- 10%
A	4.20 mm
B	4.20 mm
C	3.50 mm
D	3.50 mm
H	350 um

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