Technical Data
Data Sheet D0337, REV.-

SD5-1700-S025AB
SiC Schottky Power Rectifier Chip

Vrrm = 1700V

IF = 25A

Description

- 1700-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
SD5-1700-S025AB	4.75mm*4.75mm	Al	Ag

Maximum Ratings:

Parameter	Symbol	Value	Units
Repetitive Peak Reverse Voltage	V_{RRM}	1700	V
Surge Peak Reverse Voltage	V_{RSM}	1700	V
DC Peak Blocking Voltage	V_R	1700	V
Maximum DC Current*	I_F	66	A
Repetitive Peak Forward Surge Current	I_{FRM}	168	A
Peak One Cycle Non-Repetitive Surge Current	I_{FSM}	280	A
Operating Junction and Storage Temperature	T_J , T_{stg}	-55 to +175	˚C

Technical Data
Data Sheet D0337, REV.-

Electrical Characteristics(T=25℃ unless otherwise specified):

Characteristics	Symbol	Condition	Typ.	Max.	Units
Forward Voltage Drop*	V_{F1}	@ 25A, Pulse, T_J = 25 °C	1.55	1.8	V
	V_{F2}	@ 25A, Pulse, T_J = 175 °C	2.5	3.0	V
Reverse Current*	I_{R1}	@V_R = rated V_R, T_J = 25 °C	1	10	uA
	I_{R2}	@V_R = rated V_R, T_J = 175 °C	20	200	uA
Junction Capacitance	C_T	V_R=0V, T_J=25℃, f=1MHz	2252	-	pF
Reverse Recovery Charge	Q_c	I_F = 25A, di/dt = 200A/μs, V_R = 1700 V, T_J =25°C	279	-	nC
Capacitance Stored Energy	E_c	V_R = 1700 V, T_J = 25 °C	303	-	μJ

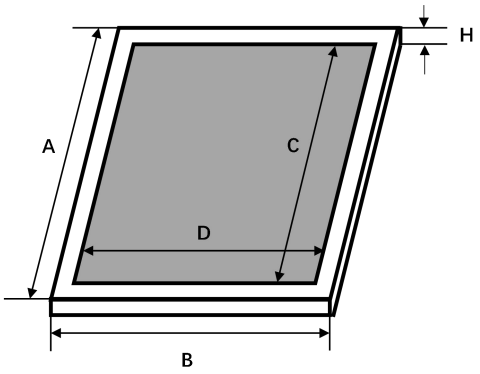
* Pulse width < 300 μs, duty cycle < 2%

Mechanical Parameters:

Parameter	Typ.	Unit
Die Size	4.75*4.75	mm
Anode Pad opening	3.50*3.50	mm
Thickness	350 ±25	μm
Anode Metalization (Al)	4	μm
Cathode Metalization (Ag)	0.4	μm
Frontside Passivation	Polyimide	

Technical Data
Data Sheet D0337, REV.-

Chip Dimension



symbol	Dimension +/- 10%
A	4.75mm
B	4.75mm
C	3.50mm
D	3.50mm
H	350um