



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



**TECHNICAL DATA**  
**DATA SHEET D0118 REV. –**

**SILICON SCHOTTKY RECTIFIER DIE**

**Applications:**

- Switching Power Supply • Converters • Free-Wheeling Diodes • Polarity Protection Diode

**Features:**

- Ultra low Reverse Leakage Current
- Soft Reverse Recovery at Low and High Temperature
- Very Low Forward Voltage Drop
- Low Power Loss, High Efficiency
- High Surge Capacity
- Guard Ring for Enhanced Durability and Long Term Reliability
- Guaranteed Reverse Avalanche Characteristics
- Electrically / Mechanically Stable during and after Packaging

**Maximum Ratings:**

Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage	$V_{RWM}$	-	45	V
Average Forward Current	$I_{F(AV)}$	50% duty cycle, rectangular wave form	30	A
Peak One Cycle Non-Repetitive Surge Current	$I_{FSM}$	8.3 ms, Sine pulse <sup>(1)</sup>	570	A
Junction Temperature	$T_J$	-	-55 to +175	°C
Storage Temperature	$T_{stg}$	-	-55 to +175	°C

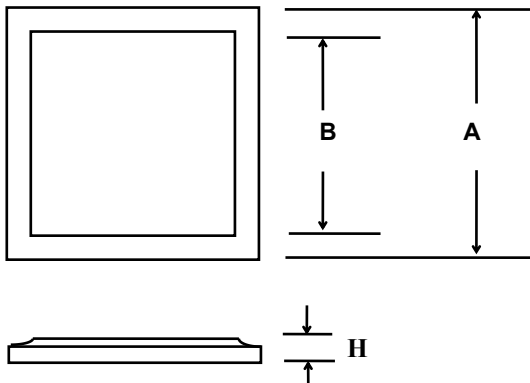
**Electrical Characteristics:**

Characteristics	Symbol	Condition	Max.	Units
Forward Voltage Drop	$V_{F1}$	@ 30A, Pulse, $T_J = 25\text{ °C}$	0.64	V
	$V_{F2}$	@ 30A, Pulse, $T_J = 125\text{ °C}$	0.57	V
Reverse Current	$I_{R1}$	@ $V_R = 45V$ , Pulse, $T_J = 25\text{ °C}$	0.8	mA
	$I_{R2}$	@ $V_R = 45V$ , Pulse, $T_J = 125\text{ °C}$	30	mA
Junction Capacitance	$C_T$	@ $V_R = 5V$ , $T_C = 25\text{ °C}$ $f_{SIG} = 1MHz$ , $V_{SIG} = 50mV$ (p-p)	1600	pF

(1) in SHD package

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**Mechanical Dimensions: In Inches (mm)**



Bottom side metalization Ag-5kA minimum  
 Top side metalization Al -25kA minimum  
 Bottom side is cathode, top side is anode  
 Dimension H = 0.0105±0.001(0.27±0.026) (It can be customized according to customer requirements)

A	B
0.175 ± 0.003(4.45 ± 0.008)	0.163 ± 0.003(4.14 ± 0.08)

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