

**TECHNICAL DATA**  
**DATA SHEET D0043 REV. B**

## 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:

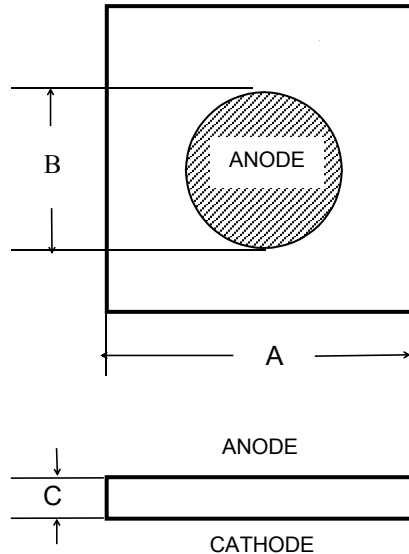
Characteristics	Symbol	Condition	Min.	Max.	Units
Working Peak Reverse Voltage	$V_{RWM}$	$I_R = 1 \mu A, T_J = 25 \text{ }^\circ\text{C}$	50	-	V
Non-repetitive Peak Reverse Voltage	$V_{RSM}$	$I_R = 10 \mu A, T_J = 25 \text{ }^\circ\text{C}$	70	-	V
Average Forward Current	$I_{F(AV)}$	50% duty cycle, rectangular wave form	-	1	mA
Junction Temperature	$T_J$	-	-55	125	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-	-55	150	$^\circ\text{C}$

### Electrical Characteristics:

Characteristics	Symbol	Condition	Max.	Units
Forward Voltage Drop	$V_{F1}$	@ 1mA, Pulse, $T_J = 25 \text{ }^\circ\text{C}$ @ 15mA, Pulse, $T_J = 25 \text{ }^\circ\text{C}$	0.41 1.00	V
Reverse Current	$I_{R1}$	@ $V_R = 50\text{V}$ , Pulse, $T_J = 25 \text{ }^\circ\text{C}$	200	nA
Junction Capacitance	$C_T$	@ $V_R = 0\text{V}$ , $T_C = 25 \text{ }^\circ\text{C}$ $f_{SIG} = 1\text{MHz}$ , $V_{SIG} = 50\text{mV (p-p)}$	2	pF

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**Mechanical Dimensions: In mil**



**1C5711**

Bottom side metalization Cr/Ag/Au-5.2kÅ nominal  
Top side metalization Ti/Ni/Au-15kÅ nominal  
Bottom side is cathode, top side is anode

**1C5711AG**

Bottom side metalization Ti/Ni/Au-4kÅ minimum  
Top side metalization Ti/Al-25kÅ minimum  
Bottom side is cathode, top side is anode

Chip	A	B	C
1C5711	15.0 ± 2.0	5.0 ± 1.0	11.0 ± 2.0
1C5711AG	15.0 ± 2.0	5.0 ± 1.0	10.0 ± 2.0

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