

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 <sub>RWM</sub>	I <sub>R</sub> = 1 μA, T <sub>J</sub> = 25 °C	50	-	V
Non-repetitive Peak Reverse Voltage	VRSM	I <sub>R</sub> = 10 μA, T <sub>J</sub> = 25 °C	70	-	V
Average Forward Current	I <sub>F(AV)</sub>	50% duty cycle, rectangular wave form	-	1	mA
Junction Temperature	TJ	-	-55	125	°C
Storage Temperature	T <sub>stg</sub>	-	-55	150	°C

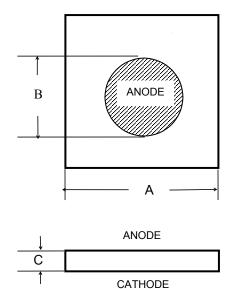
### **Electrical Characteristics:**

Characteristics	Symbol	Condition	Max.	Units
Forward Voltage Drop	V <sub>F1</sub>	@ 1mA, Pulse, T <sub>J</sub> = 25 °C	0.41	V
		@ 15mA, Pulse, T <sub>J</sub> = 25 °C	1.00	
Reverse Current	I <sub>R1</sub>	@V <sub>R</sub> = 50V, Pulse,	200	nA
		T <sub>J</sub> = 25 °C		
Junction Capacitance	C <sub>T</sub>	@V <sub>R</sub> = 0V, T <sub>C</sub> = 25 °C	2	pF
		$f_{SIG} = 1MHz,$		
		$V_{SIG} = 50 \text{mV (p-p)}$		



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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	Α	В	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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