

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:

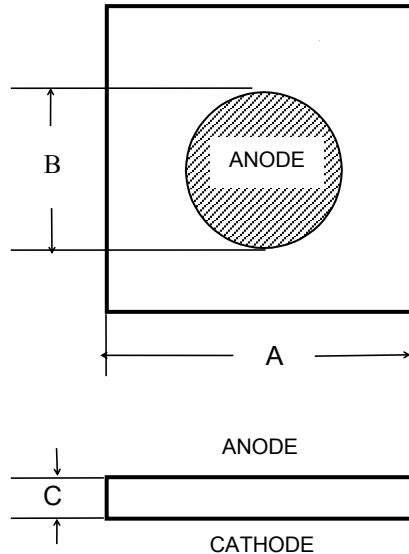
Characteristics	Symbol	Condition	Min.	Max.	Units
Working Peak Reverse Voltage	V_{RWM}	$I_R = 1 \mu A, T_J = 25 \text{ }^\circ C$	50	-	V
Non-repetitive Peak Reverse Voltage	V_{RSM}	$I_R = 10 \mu A, T_J = 25 \text{ }^\circ C$	70	-	V
Average Forward Current	$I_{F(AV)}$	50% duty cycle, rectangular wave form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

Electrical Characteristics:

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