

SILICON SCHOTTKY RECTIFIER DIE

High Voltage/Low Leakage

Applications:

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

Features:

- High voltage (150V)
- Low reverse leakage Current
- 175°C Maximum Junction Temperature

Maximum Ratings:

Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage	V_{RWM}	-	150	V
Max. Average Forward Current	$I_{F(AV)}$	50% duty cycle, rectangular wave form	45	A
Max. Junction Temperature	T_J	-	-65 to +175	°C
Max. Storage Temperature	T_{stg}	-	-65 to +175	°C

Electrical Characteristics⁽¹⁾:

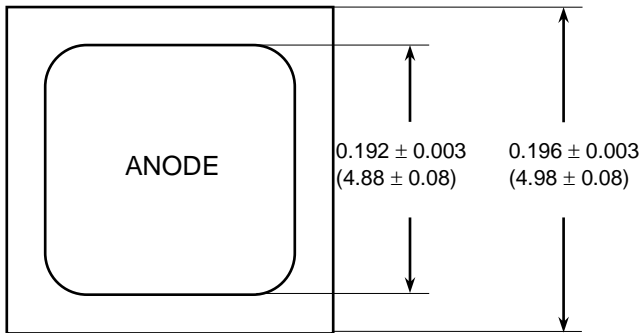
ALL RATINGS ARE @ $T_A = 25\text{ °C}$ UNLESS OTHERWISE SPECIFIED.

Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop	V_{F1}	@ 45 A, Pulse, $T_J = 25\text{ °C}$	0.82	V
	V_{F2}	@ 45 A, Pulse, $T_J = 125\text{ °C}$	0.70	V
Max. Reverse Current	I_{R1}	@ $V_R = 150\text{V}$, Pulse, $T_J = 25\text{ °C}$	400	uA
	I_{R2}	@ $V_R = 150\text{V}$, Pulse, $T_J = 125\text{ °C}$	10	mA
Max. Junction Capacitance	C_T	@ $V_R = 5\text{V}$, $T_C = 25\text{ °C}$ $f_{SIG} = 1\text{MHz}$, $V_{SIG} = 50\text{mV (p-p)}$	1200	pF

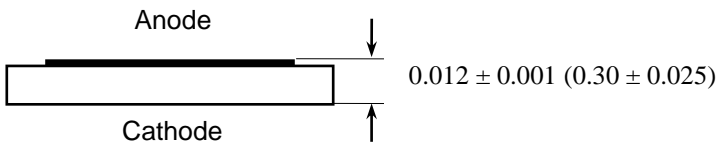
(1) Forward voltage drop will vary depending on package used. Specification is based on a Kelvin configuration

TECHNICAL DATA
DATASHEET 6105, REV A

PACKAGE DIMENSIONS (inches/mm):



Top side metallization:
A Version: TiW/Al – 51.5 kÅ nominal
B version: TiW/TiNi/Ag – 23.5 kÅ nominal
Bottom side metallization: TiNi/Ag – 10 kÅ nominal
Top side is anode, bottom side is cathode



PART ORDERING INFORMATION:

SD196SF150 x x

Part Number

Metal Combinations (blank is Ag top/Ag bottom):

Suffix	Top	Bottom	Part Number
A	Al	Ag	SD196SF150A
B	Ag	Ag	SD196SF150B

Quality Level

Suffix	Part Number	Description
H	SD196SF150AH	Class H Level
K	SD196SF150AK	Class K Level

TECHNICAL DATA
DATASHEET 6105, REV A

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