

1C5614
 1C5616
 1C5618
 1C5620
 1C5622

SENSITRON
SEMICONDUCTOR

TECHNICAL DATA
 DATA SHEET 5061, REV. B.1

**GENERAL PURPOSE
 SILICON RECTIFIER DIE**

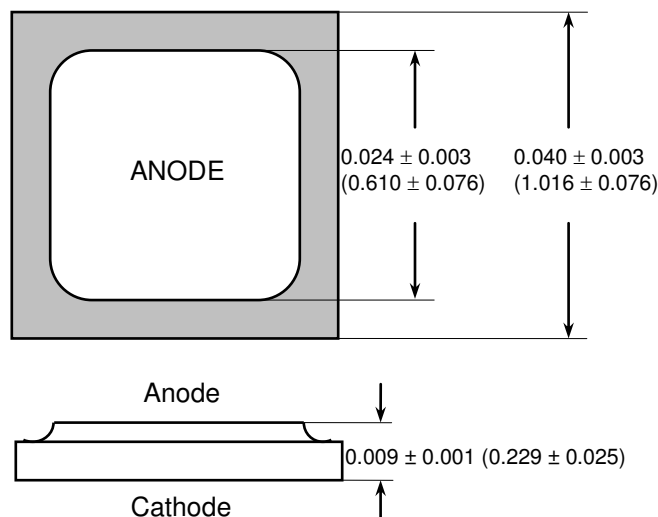
Maximum Ratings:

Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage 1C5614 1C5616 1C5618 1C5620 1C5622	V_{RWM}	-	200 400 600 800 1000	V
Max. Average Forward Current	$I_{F(AV)}$	@ 55°C	1.0	A
Die Size	-	-	40	mil
Max. Junction Temperature	T_J	-	-55 to +175	°C
Max. Storage Temperature	T_{stg}	-	-55 to +175	°C

Electrical Characteristics:

Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop	V_{F1}	@ 3.0A, Pulse, $T_J = 25\text{ °C}$ Duty cycle $\leq 2\%$, pulse width $\leq 300\mu\text{s}$	1.3	V
Max. Reverse Current	I_{R1}	@ $V_R = 200\text{V}$, Pulse, $T_J = 25\text{ °C}$	0.5	μA
	I_{R2}	@ $V_R = 200\text{V}$, Pulse, $T_J = 100\text{ °C}$	25	μA
Reverse Recovery Time	t_{rr}	$I_f = 500\text{mA}$, $I_r = 1\text{A}$, $I_{rm} = 250\text{mA}$	2000	ns

Mechanical Dimensions: In Inches / mm for 1C5614



Top side metalization - Aluminum - 25 kÅ

Bottom side metalization - Titanium 1.2 kÅ,
 Nickel 1.8 kÅ, Silver - 30 kÅ minimum

Bottom side is cathode, top side is anode.

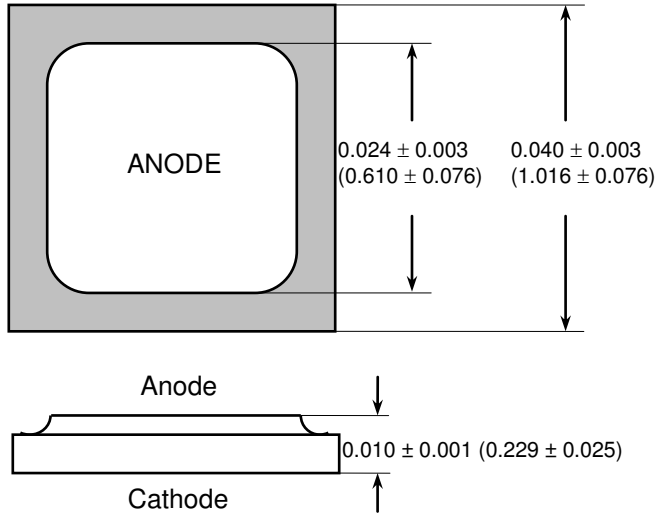
See part ordering information for different options

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Mechanical Dimensions: In Inches / mm for 1C5616 and 1C5618



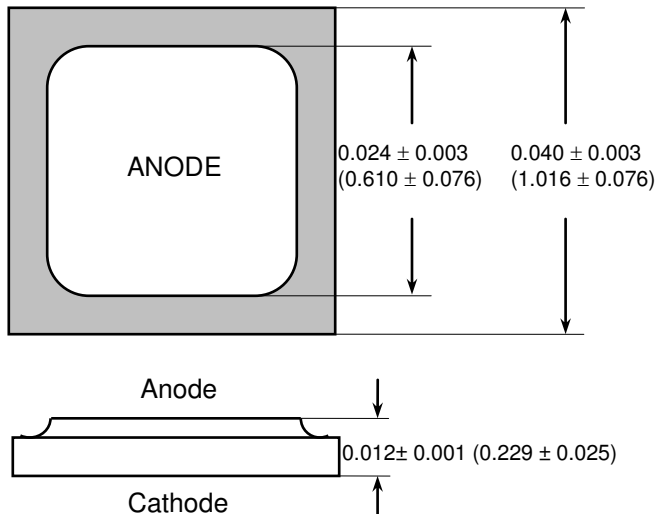
Top side metalization - Aluminum - 25 kÅ

Bottom side metalization - Titanium 1.2 kÅ,
Nickel 1.8 kÅ, Silver - 30 kÅ minimum

Bottom side is cathode, top side is anode.

See part ordering information for different options

Mechanical Dimensions: In Inches / mm for 1C5620 and 1C5622



Top side metalization - Aluminum - 25 kÅ

Bottom side metalization - Titanium 1.2 kÅ,
Nickel 1.8 kÅ, Silver - 30 kÅ minimum

Bottom side is cathode, top side is anode.

See part ordering information for different options

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PART ORDERING INFORMATION

Default part number is Al top, Ag bottom.

Add the following suffix for these metal combinations:

Suffix	Top	Bottom	Part Number
	Al	Ag	1C5614
AG	Al	Au	1C5614AG
BB	Ag	Ag	1C5614BB
BG	Ag	Au	1C5614BG
GG	Au	Au	1C5614GG
GB	Au	Ag	1C5614GB
-R	- Reverse polarity -		1C5614-R

A = Ti (0.3 kA) / Al (25 kA)

B = Ti (1.2 kA) / Ni (1.8 kA) / Ag (30kA)

G = Ti (1.2 kA) / Ni (1.8 kA) / Au (12kA) (**TOP**) / Ti (1.2 kA) / Ni (1.8 kA) / Au (4kA) (**BOTTOM**)

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