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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China







1N5614C THRU 1N5622C 200V-1000V Axial Leaded Fast Avalanche Rectifier Diode

HIGH-RELIABILITY PRODUCTS

Features

 $V_R = 200V$ to 1000V $I_R = 0.5\mu A$

 $Trr = 3.0 \mu s$

 $V_F = 1.2V$ at $I_F = 1A$

Quick Reference Data

- ◆ Low reverse leakage current
- ◆ Hermetically sealed
- ◆ Good thermal shock resistance
- Fast Trr
- ◆ Low forward voltage drop

Absolute Maximum Ratings

Electrical specifications @ $T_A = 25$ °C unless otherwise specified.

Parameter		1N5614C	1N5616C	1N5618C	1N5620C	1N5622C	Units
Maximum Reccurrent Peak Reverse Voltage	V _{RRM}	200	400	600	800	1000	V
Maximum DC blocking Voltage	V _{DC}	200	400	600	800	1000	V
Maximum Average Forward Rectified Current 0.375" (9.5mm) lead length at T _A =55 ^O C	I _{F(av)}	1.0					А
Peak Forward Surge Current 8.3ms single Half sinewave superimposed on rated load	I _{FSM}	50.0					А
Maximum Instantaneous Forward Voltage at 1.0A	V _F	1.2					V
Maximum DC Reverse Current T _A =25 ^O C at rated DC blocking voltage T _A =100 ^O C	I _R	0.5 25					μΑ
Maximum Reverse Recovery Time ⁽¹⁾	Trr	3.0					μs
Typical Junction Capacitance ⁽²⁾	С	45.0				pF	
Maximum Reverse Breakdowm Voltage I _R =50 μA	V _{BR}	220	440	660	880	1100	V
Typical Thermal Resistance ⁽³⁾	R _{OJL}	55.0					°C/W
Storage and Operating Juntion Temperature	T _{STG} , T _J	-65 to +175				°C	

Note:

1. Reverse Recovery Condition $I_F = 0.5A$, $I_R = 1.0A$, $I_{RR} = 0.25A$

Rev 1.0

- 2. Measured at 1.0 MHz and applied reverse voltage of 12Vdc
- 3. Thermal Resistance from Junction to Ambient at 3/8"lead length.

Rating and Characteristic Curves

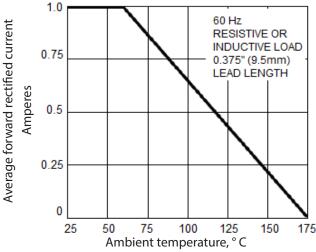
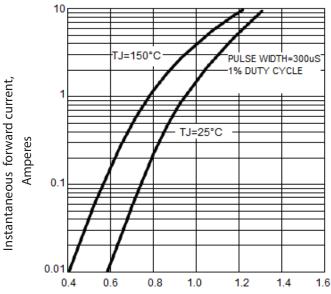


Figure 1. Forward current derating curve



Instantaneous forward voltage, volts
Figure 3. Typical instantaneous forward characteristics

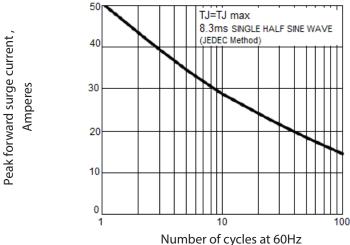
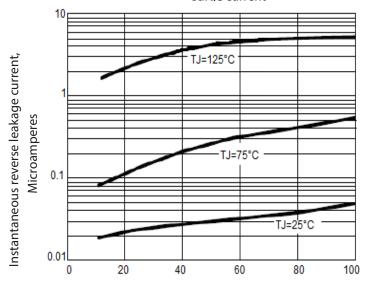
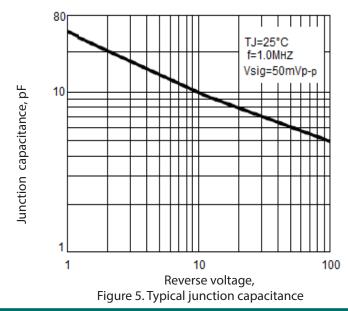


Figure 2. Maximum non-repetitive peak forward surge current



Percent of rated peak reverse voltage, % Figure 4. Typical reverse characteristics



Ordering Information

Part Number	Packaging ⁽¹⁾
1N5614C Thru 1N5622C	Bulk
1N5614C.TR Thru 1N5622C.TR	Tape and reel

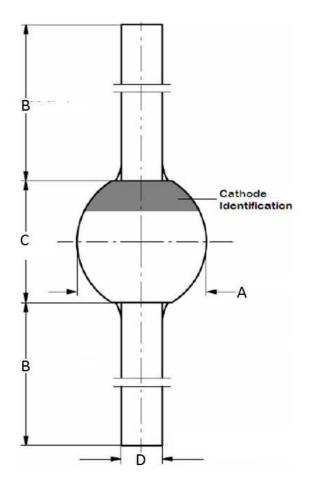
NOTE:

(1)Please consult factory for quantities

Marking

Component will only have a cathode band identifier. The full part number will be on the box label.

Outline Drawing



	Dimensions						
Dimension	Inc	hes	Millimeters				
	Min	Max	Min	Max			
А	-	0.140	-	3.60			
В	1.014	-	26.00	-			
С	-	0.156	-	4.00			
D	-	0.032	-	0.82			



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Contact Information

Semtech Corporation 200 Flynn Road, Camarillo, CA 93012 Phone: (805) 498-2111, Fax: (805) 498-3804 www.semtech.com