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

HIGH-RELIABILITY PRODUCTS

Features

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

Trr = $3.0 \mu s$

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

Ouick 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		200	400	600	800	1000	V
Maximum DC blocking Voltage		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 $T_A = 25^{\circ}C$ at rated DC blocking voltage $T_A = 100^{\circ}C$	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 $I_F = 0.5A$, $I_R = 1.0A$, $I_{RR} = 0.25A$
- 2. Measured at 1.0 MHz and applied reverse voltage of 12Vdc

Rev 1.0

3. Thermal Resistance from Junction to Ambient at 3/8"lead length.

Rating and Characteristic Curves

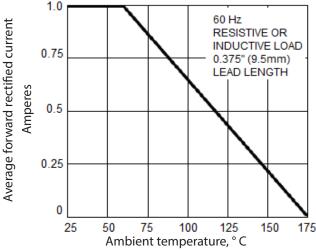
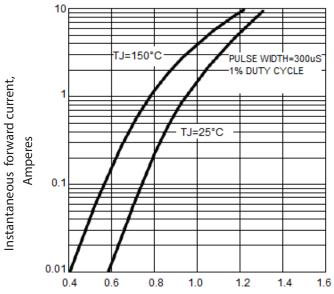


Figure 1. Forward current derating curve



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

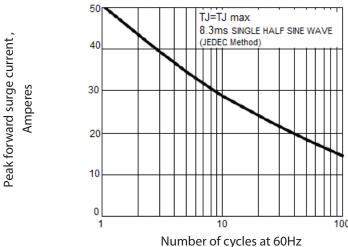
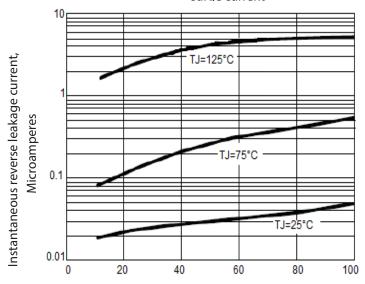
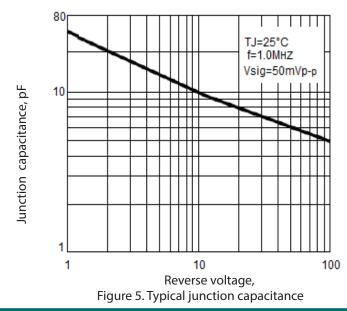


Figure 2. Maximum non-repetitive peak forward surge current



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		

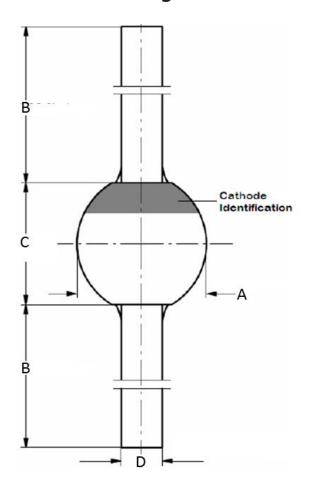
NOTE:

(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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