

HIGH-RELIABILITY PRODUCTS

Features

$V_R = 400V$
 $I_R = 1.0\mu A$
 $t_{rr} = 150ns$
 $V_F = 1.6V$ at $I_F = 3A$

Quick Reference Data

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

Absolute Maximum Ratings

Electrical specifications @ $T_A = 25^\circ C$ unless otherwise specified.

Parameter	Symbol	1N5617C	Units
Maximum Reccurent Peak Reverse Voltage	V_{RRM}	400	V
Maximum RMS Voltage	V_{RMS}	280	V
Maximum DC blocking Voltage	Vdc	400	V
Maximum Average Forward Rectified Current 3/8"lead length at $T_A=55^\circ C$	$I_{F(av)}$	1.0	A
Peak Forward Surge Current 8.3ms single Half sinewave superimposed on rated load	I_{FSM}	25	A
Maximum Instantaneous Forward Voltage at 3.0A	V_F	1.6	V
Maximum DC Reverse Current $T_A=25^\circ C$ at rated DC blocking voltage $T_A=100^\circ C$	I_R	1.0 25	μA
Maximum Reverse Recovery Time ⁽¹⁾	t_{rr}	150	ns
Typical Junction Capacitance ⁽²⁾	C_J	40	pF
Typical Thermal Resistance ⁽³⁾	$R_{\theta JL}$	45	$^\circ C/W$
Storage and Operating Juntion Temperature	T_{STG}, T_J	-65 to +175	$^\circ C$
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 4.0Vdc 3. Thermal Resistance from Junction to Ambient at 3/8"lead length.			

Rating and Characteristic Curves

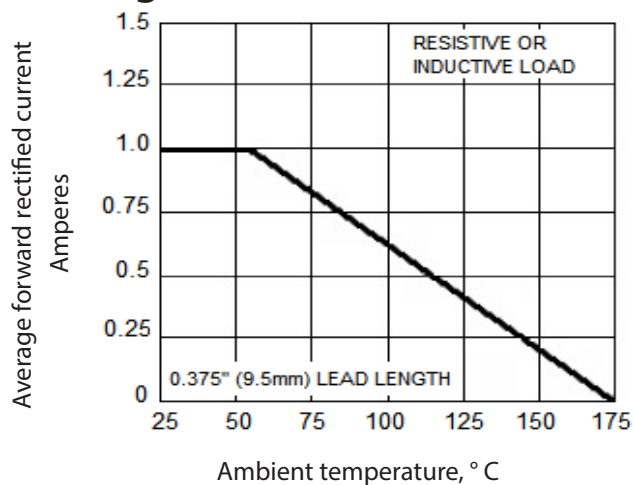


Figure 1. Forward current derating curve

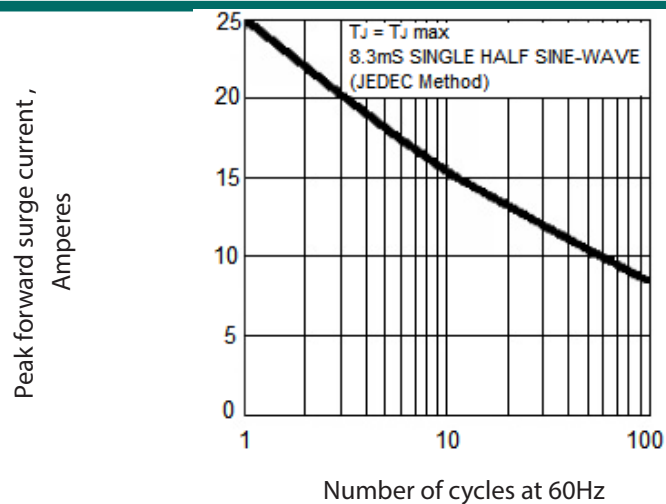


Figure 2. Maximum non-repetitive peak forward surge current

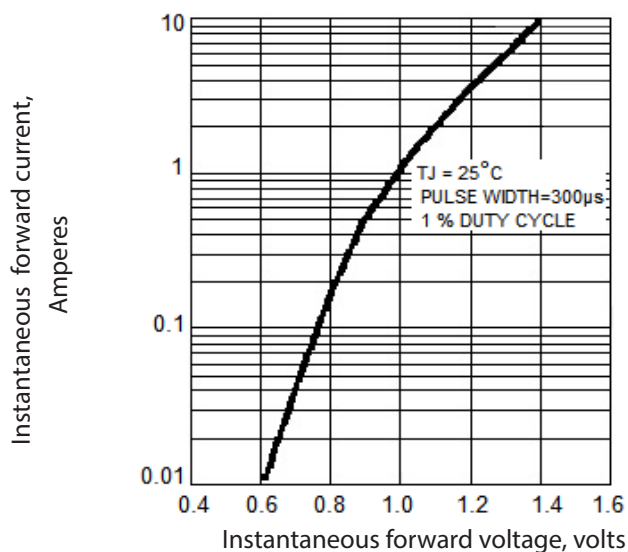


Figure 3. Typical instantaneous forward characteristics

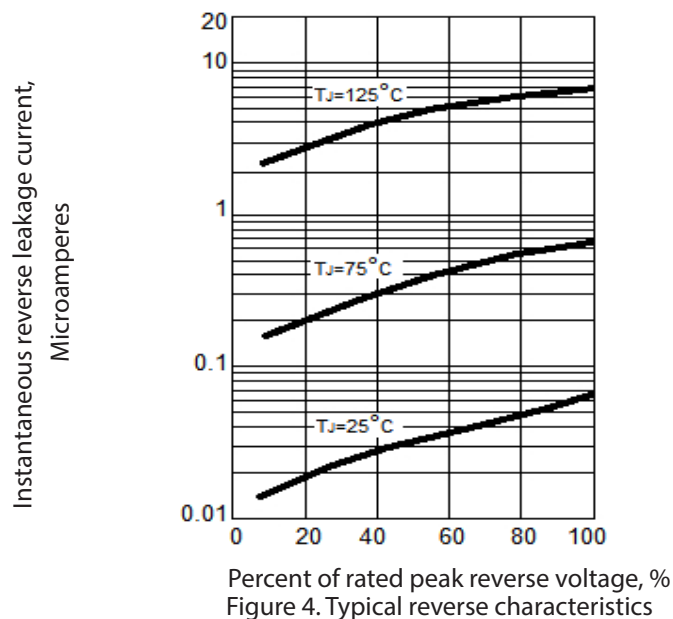


Figure 4. Typical reverse characteristics

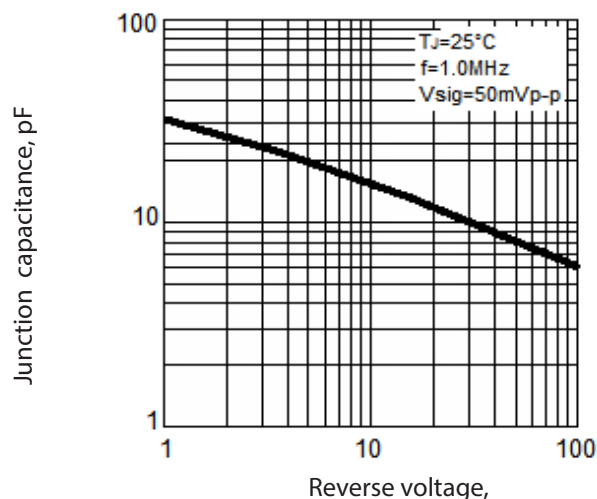


Figure 5. Typical junction capacitance

Ordering Information

Part Number	Packaging ⁽¹⁾
1N5617C	Bulk
1N5617C.TR	Tape and reel

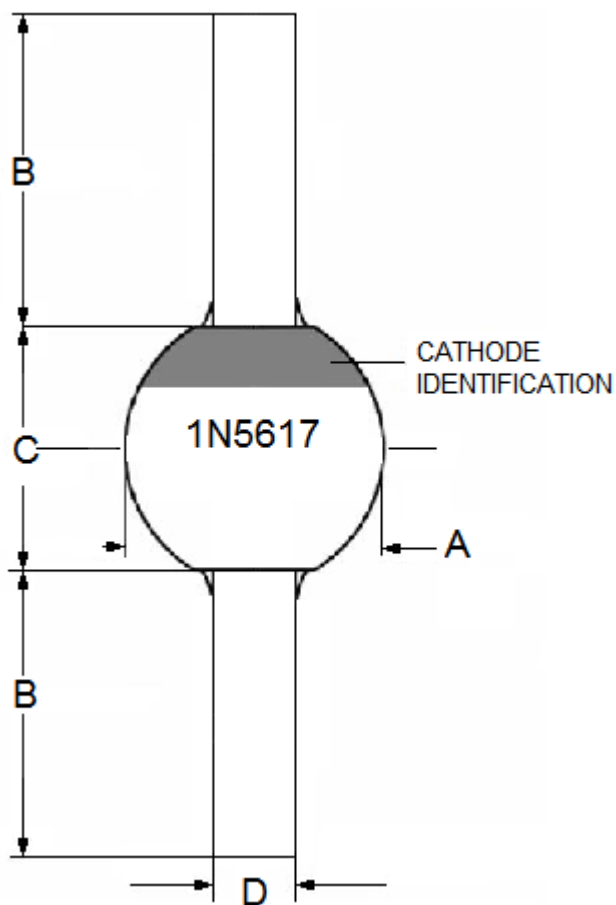
NOTE:

(1)Please consult factory for quantities

Marking

Component will have a cathode band identifier and marked 1N5617

Outline Drawing



Dimension	Dimensions			
	Inches		Millimeters	
	Min	Max	Min	Max
A	-	0.140	-	3.60
B	1.014	-	26.00	-
C	-	0.156	-	4.00
D	-	0.032	-	0.82



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