

HIGH-RELIABILITY PRODUCTS

Features

$V_R = 400V$
 $I_R = 1.0\mu A$
 $t_{rr} = 150ns$
 $V_F = 1.5V$ at $I_F = 9A$

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	1N5418C	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 $T_a=55^\circ C$	$I_{F(av)}$	3.0	A
Peak Forward Surge Current 8.3ms single Half sinewave superimposed on rated load	I_{FSM}	100	A
Maximum Instantaneous Forward Voltage at 9.0A	V_F	1.5	V
Maximum DC Reverse Current $T_A = 25^\circ C$ at rated DC blocking voltage $T_A = 100^\circ C$	I_R	1.0 20	μA
Maximum Reverse Recovery Time ⁽¹⁾	t _{rr}	150	ns
Typical Thermal Resistance ⁽²⁾	$R_{\theta JL}$	25	$^\circ C/W$
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. Thermal Resistance from Junction to Ambient at 3/8"lead length.

Rating and Characteristic Curves

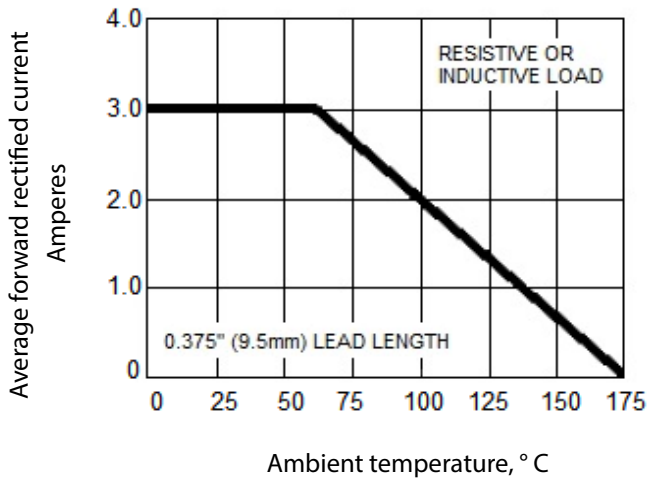


Figure 1. Forward current derating curve

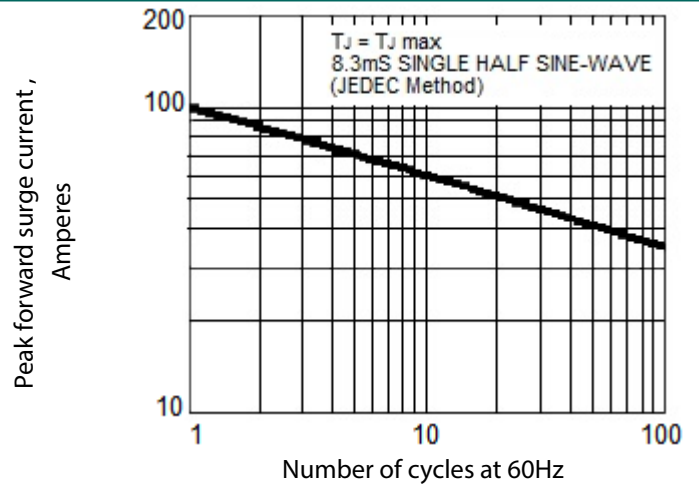


Figure 2. Maximum non-repetitive peak forward surge current

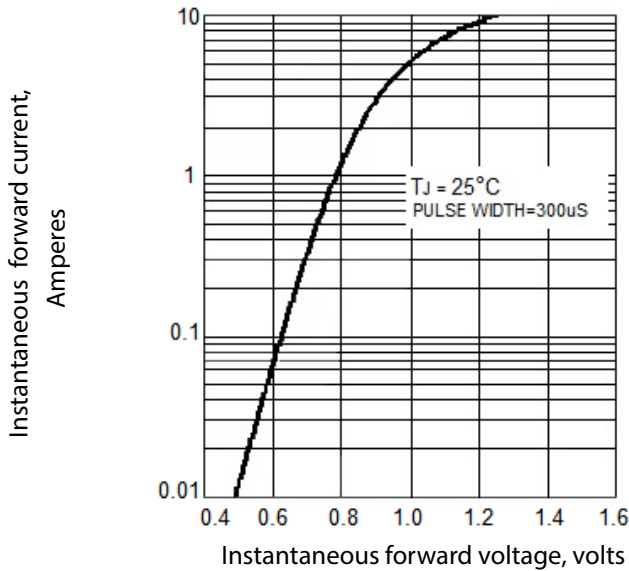


Figure 3. Typical instantaneous forward characteristics

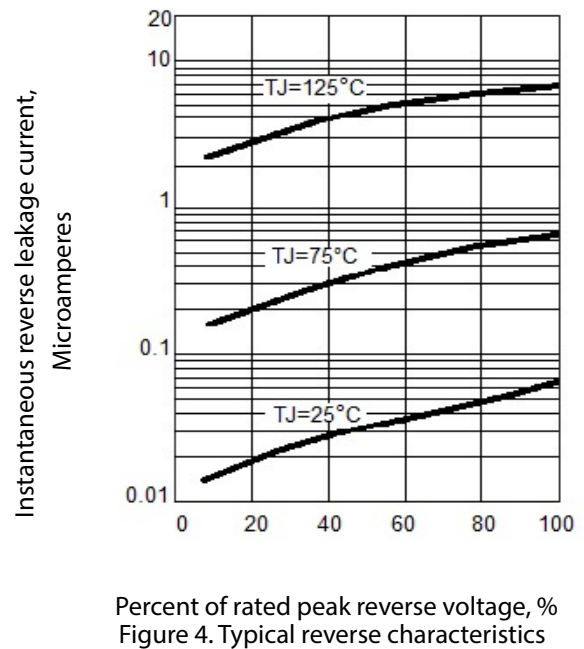


Figure 4. Typical reverse characteristics

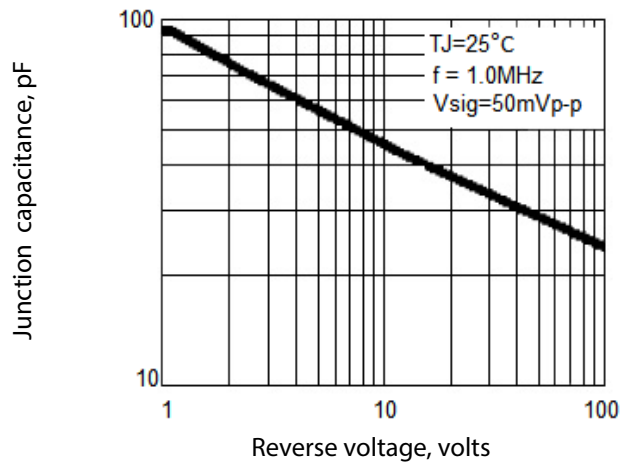


Figure 5. Typical junction capacitance

Ordering Information

Part Number	Packaging ⁽¹⁾
1N5418C	Bulk
1N5418C.TR	Tape and reel

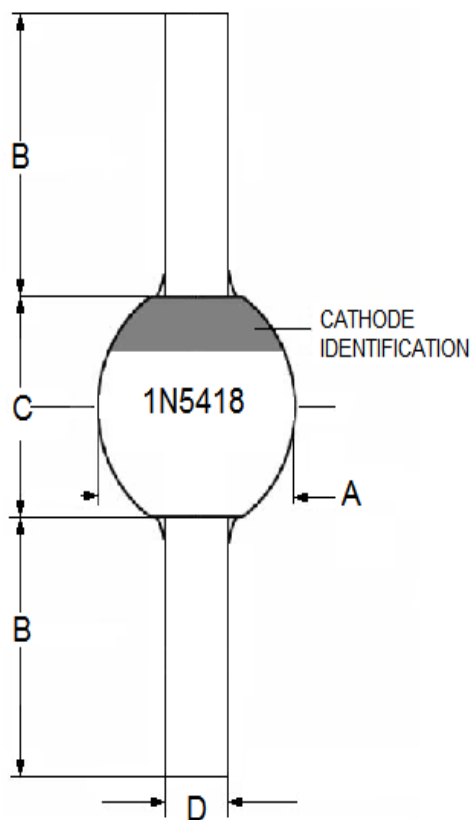
NOTE:

(1)Please consult factory for quantities

Marking

Component will only have a cathode band identifier.

Outline Drawing



Dimension	Dimensions			
	Inches		Millimeters	
	Min	Max	Min	Max
A	-	0.177	-	4.50
B	1.014	-	26.00	-
C	0.165	0.189	4.20	4.80
D	-	0.043	-	1.10