

HIGH-RELIABILITY PRODUCTS

Features

$V_R = 150V$
 $I_R = 5.0\mu A$
 $t_{rr} = 30ns$
 $V_F = 0.875V$ at $I_F = 4.0A$

Quick Reference Data

- ◆ Low reverse leakage current
- ◆ Very low reverse recovery time
- ◆ Hermetically sealed
- ◆ Good thermal shock resistance
- ◆ Low forward voltage drop

Absolute Maximum Ratings

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

Parameter	Symbol	1N5811C	Units
Maximum Reccurent Peak Reverse Voltage	V_{RRM}	150	V
Maximum RMS Voltage	V_{RMS}	112	V
Maximum DC blocking Voltage	Vdc	150	V
Maximum Average Forward Rectified Current 3/8"lead length at $T_A = -75^\circ C$	I_{FAV}	6.0	A
Peak Forward Surge Current 8.3ms single Half sinewave superimposed on rated load	I_{FSM}	125	A
Maximum Instantaneous Forward Voltage at 4.0A	V_F	0.875	V
Maximum DC Reverse Current $T_A = 25^\circ C$ at rated DC blocking voltage $T_A = 100^\circ C$	I_R	5.0 150	μA
Maximum Reverse Recovery Time ⁽¹⁾	t _{rr}	30	ns
Typical Thermal Resistance ⁽²⁾	$R_{\theta JL}$	35.5	$^\circ C/W$
Storage and Operating Juntion Temperature	T_{STG}, T_J	-65 to +175	$^\circ C$

Note:

1. Reverse Recovery Condition $I_F = 1.0A$, $I_R = 1.0A$, $I_{RR} = 0.1A$
2. Thermal Resistance from Junction to Ambient at 3/8"lead length.

Rating and Characteristic Curves

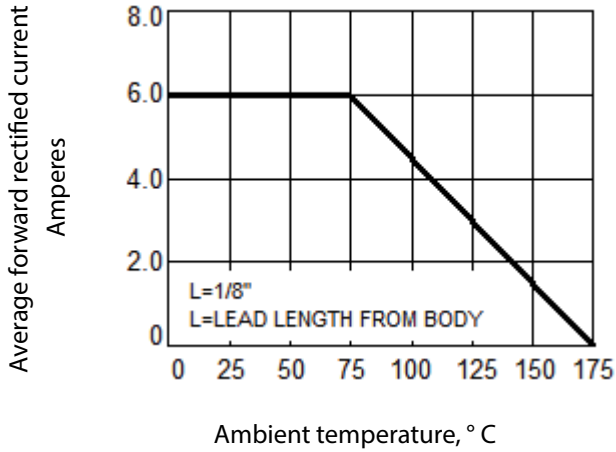


Figure 1. Forward current derating curve

Peak forward surge current, Amperes

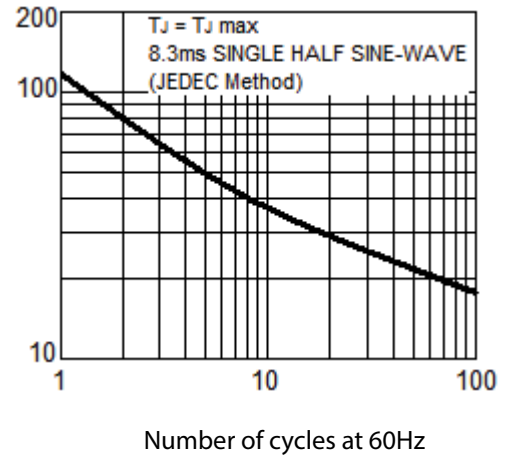


Figure 2. Maximum non-repetitive peak forward surge current

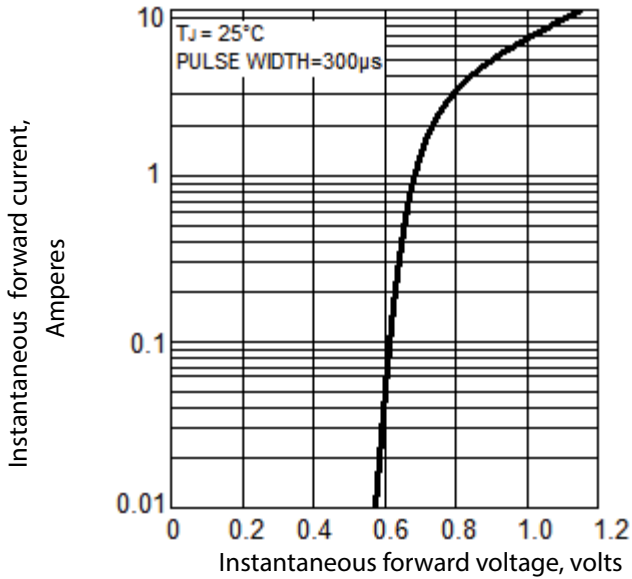


Figure 3. Typical instantaneous forward characteristics

Instantaneous reverse leakage current, Microamperes

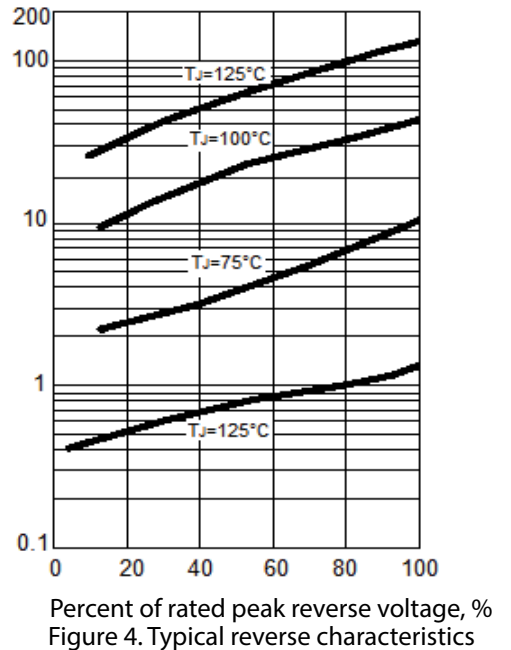


Figure 4. Typical reverse characteristics

Ordering Information

Part Number	Packaging ⁽¹⁾
1N5811C	Bulk
1N5811C.TR	Tape and reel

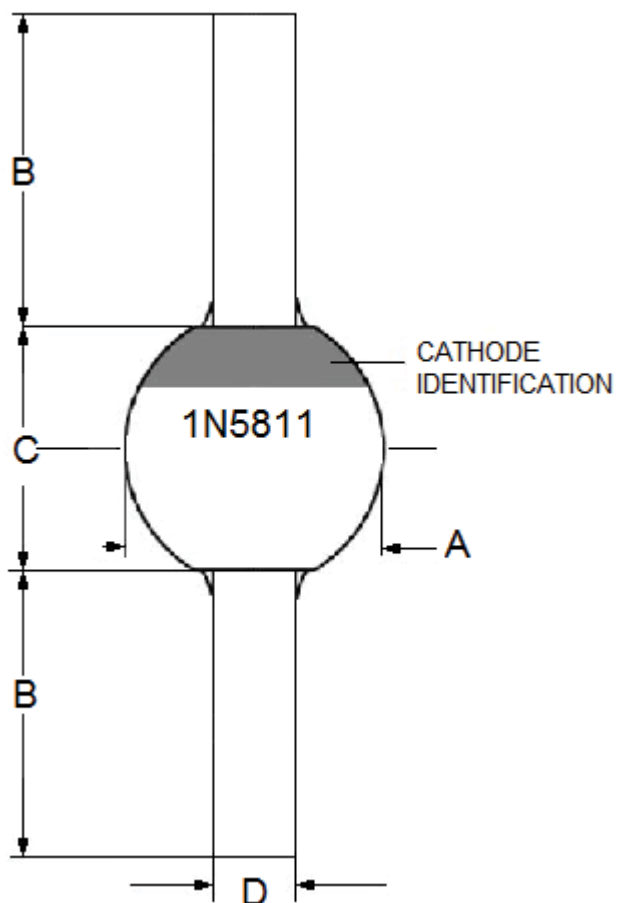
NOTE:

(1)Please consult factory for quantities

Marking

Component will have a cathode band identifier and marked 1N5811

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