

1N5554C 1KV Axial Leaded Standard Recovery Rectifier Diode

HIGH-RELIABILITY PRODUCTS Features

$$\begin{split} &V_R = 1000V \\ &I_R = 1.0 \mu A \\ &trr = 3 \mu s \\ &V_F = 1.1 V \ at \ I_F = 3 A \end{split}$$

Quick Reference Data

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

Absolute Maximum Ratings

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

Parameter	Symbol	1N5554C	Units
Maximum Reccurrent Peak Reverse Voltage	V _{RRM}	1100	V
Maximum RMS Voltage	V _{RMS}	770	V
Maximum DC blocking Voltage	Vdc	1100	V
Maximum Average Forward Rectified Current 3/8"lead length at Ta=70°C	I _{F(av)}	3.0	А
Peak Forward Surge Current 8.3ms single Half sinewave superimposed on rated load	I _{FSM}	90	А
Maximum Instantaneous Forward Voltage at 2.0A	V _F	1.1	V
Maximum DC Reverse Current T _A =25 ^O C at rated DC blocking voltage T _A =150 ^O C	I _R	1.0 100	μΑ
Maximum Reverse Recovery Time ⁽¹⁾	trr	3.0	μs
Typical Junction Capacitance ⁽²⁾	С	40	pF
Typical Thermal Resistance ⁽³⁾	R _{OJ A}	20	°C/W
Storage and Operating Juntion Temperature	T _{STG} , T _J	-65 to +175	°С

Note:

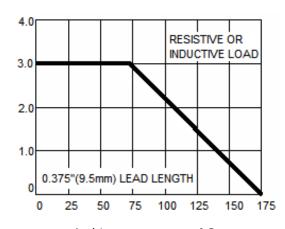
- 1. Reverse Recovery Condition $I_F = 0.5A$, $I_R = 1.0A$, $I_{RR} = 0.25A$
- 2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
- 3. Thermal Resistance from Junction to Ambient at 3/8"lead length.

Rating and Characteristic Curves

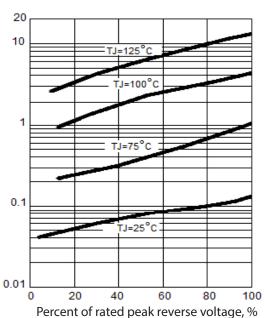
Average forward rectified current

Instantaneous reverse leakage current,

Microamperes



Ambient temperature, ° C Figure 1. Forward current derating curve



Instantaneous forward current,

100 8.3ms SINGLE HALF SINE-WAVE (JEDEC METHOD) Peak forward surge current, 60 Amperes 40 20 0 10 100 Number of cycles at 60Hz

Figure 2. Maximum non-repetitive peak forward

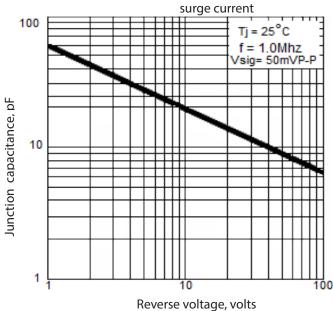
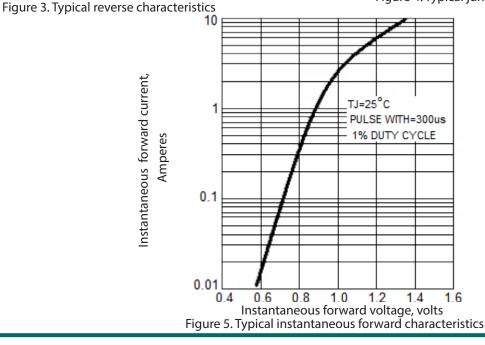


Figure 4. Typical junction capacitance



Ordering Information

Part Number	Packaging ⁽¹⁾			
1N5554C	Bulk			
1N5554C.TR	Tape and reel			

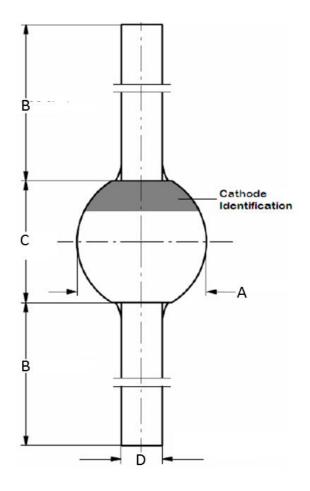
NOTE:

(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



Dimension	Dimensions				
	Inches		Millimeters		
	Min	Max	Min	Max	
А	-	0.178	-	4.50	
В	1.014	-	26.00	-	
С	0.165	0.189	4.20	4.80	
D	-	0.043	-	1.10	



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