1N4942C
200V Axial Leaded
Fast Switching Plastic Rectifier

HIGH-RELIABILITY PRODUCTS

Features

VR = 200V
IR = 5.0µA
trr = 150ns
VF = 1.3V at IF = 1A

Quick reference data

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

Absolute Maximum Ratings

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

Parameter	Symbol	1N4942C	Units
Maximum Reccurrent Peak Reverse Voltage	V_{RRM}	200	V
Maximum RMS Voltage	V_{RMS}	140	V
Maximum DC blocking Voltage	Vdc	200	V
Maximum Average Forward Rectified Current 3/8"lead length at T_A=55°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 1.0A and 25°C	V_F	1.3	V
Maximum DC Reverse Current T_A =25°C at rated DC blocking voltage T_A =125°C	I_R	5.0 200	µA
Maximum Reverse Recovery Time (1)	trr	150	ns
Typical Junction Capacitance(2)	C_J	15	pF
Typical Thermal Resistance(3)	$R_{\theta JL}$	55	°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 4.0Vdc
3. Thermal Resistance from Junction to Ambient at 3/8"lead length.

Rating and Characteristic Curves

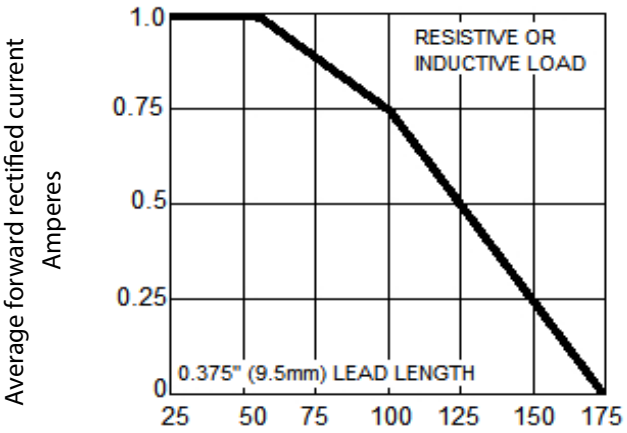


Figure 1. Forward current derating curve

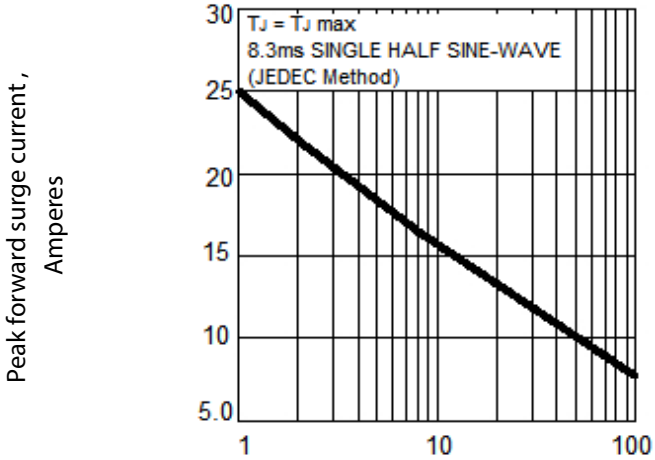


Figure 2. Maximum non-repetitive peak forward surge current

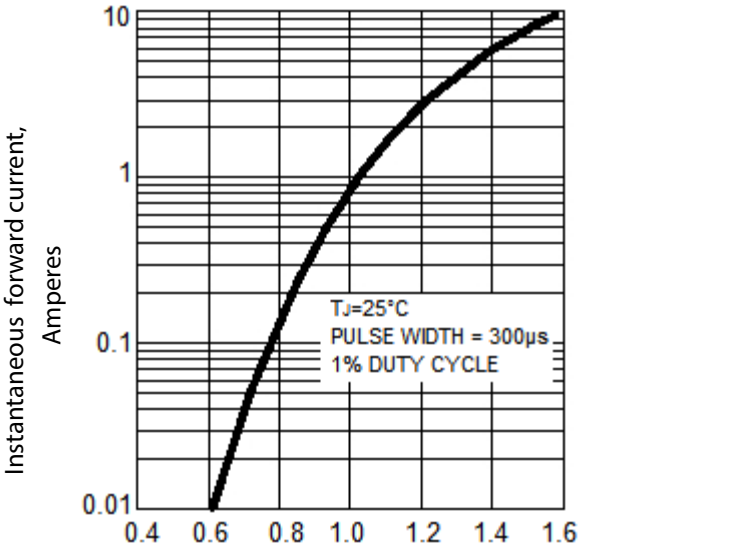


Figure 3. Typical instantaneous forward characteristics

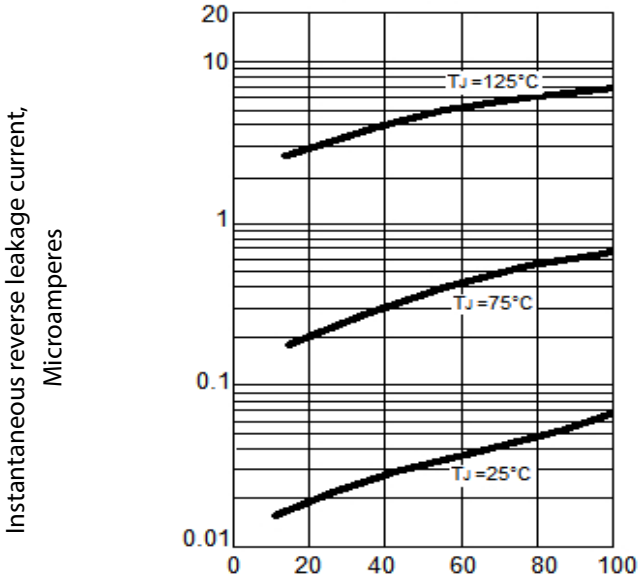


Figure 4. Typical reverse characteristics

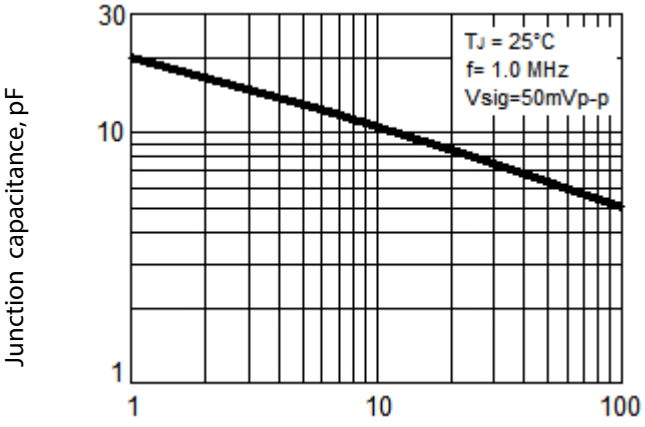


Figure 5. Typical junction capacitance

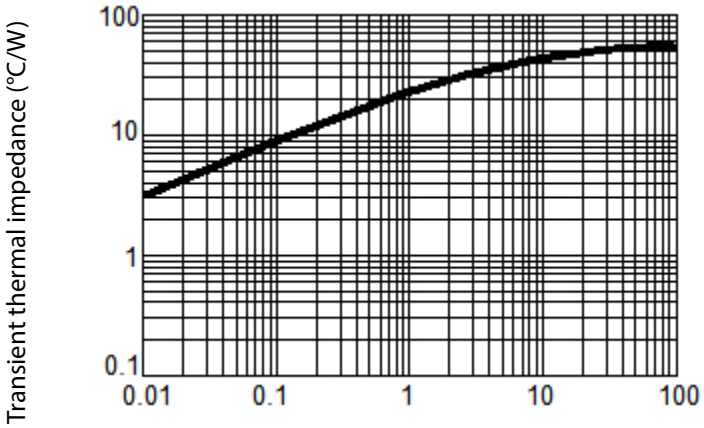


Figure 6. Typical transient thermal impedance

Ordering Information

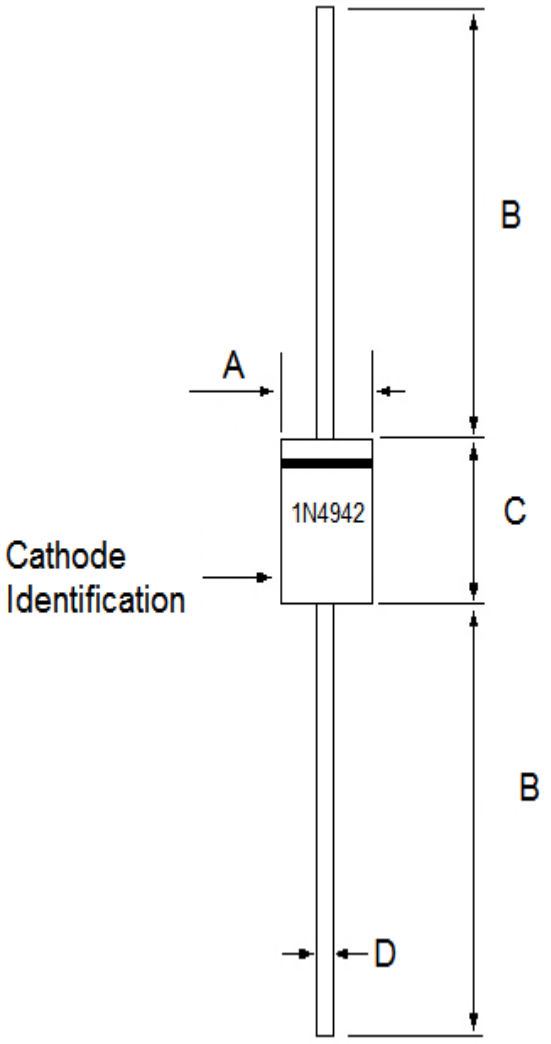
Part Number	Packaging[1]
1N4942C	Bulk
1N4942C.TR	Tape and reel

NOTE:
(1)Please consult factory for quantities

Marking

Component will have a cathode band identifier and marked 1N4942

Outline Drawing



Dimension	Dimensions			
	Inches		Millimeters	
	Min	Max	Min	Max
A	0.080	0.107	2.00	2.70
B	1.000	-	25.40	-
C	0.160	0.205	4.10	5.20
D	0.028	0.034	0.71	0.86