

1N4001S-7S

STANDARD RECOVERY RECTIFIERS

Description

These Axial Leaded Rectifiers are used for General-Purpose Low-Power Applications

Features

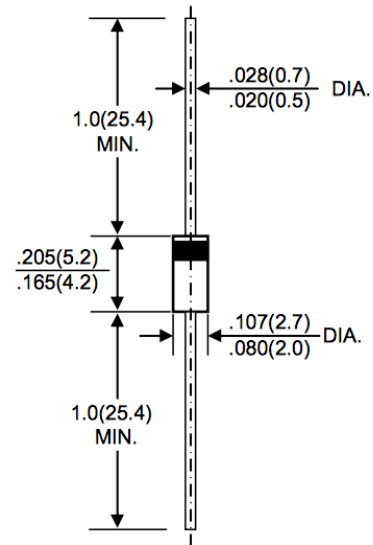
- Low cost
- Diffused junction
- Low forward voltage drop
- Low reverse leakage current
- High current capability
- The plastic material carries UL recognition 94V-0

Mechanical Data

- Case: JEDEC A-405 molded plastic
- Polarity: Color band denotes cathode
- Weight: 0.008 ounces , 0.22 grams
- Mounting position :Any

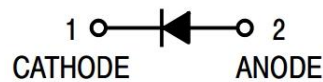
Packing & Order Information

3,000/Reel



Dimensions in inches and (millimeters)

Graphic symbol



RoHS
COMPLIANT

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

ABSOLUTE MAXIMUM RATINGS (Tc=25°C)

Parameter	Symbol	1N 4001S	1N 4002S	1N 4003S	1N 4004S	1N 4005S	1N 4006S	1N 4007S	Unit
Peak Repetitive Reverse Voltage Working	V_{RRM}								
Peak Reverse Voltage DC Blockng Voltage	V_{RMW} V_R	50	100	200	400	600	800	1000	V
Non-Repetitive Peak Reverse Voltage(halfwave, single phase, 60Hz)	V_{RSM}	60	120	240	480	720	1000	1200	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectified Current at Half Wave(0.375" Lead Length at Ta=75°C)	I_O	1							A
Non-Repetitive Peak Surge Current 8.3ms single half sine-wave superimposed on rated Load	I_{FSM}	30							A

1N4001S-7S

STANDARD RECOVERY RECTIFIERS

ABSOLUTE MAXIMUM RATINGS (Tc=25°C)

Parameter	Symbol	1N 4001S	1N 4002S	1N 4003S	1N 4004S	1N 4005S	1N 4006S	1N 4007S	Unit
Thermal Resistance from Junction to Ambient in free air	$R_{th(j-a)}$	50							°C/W

ABSOLUTE MAXIMUM RATINGS (Tc=25°C)

Parameter	Symbol	1N 4001S	1N 4002S	1N 4003S	1N 4004S	1N 4005S	1N 4006S	1N 4007S	Unit
Storage Temperature Range	Tstg	- 65 to +175							°C
Operating Junction Temperature	Tj	- 65 to +175							°C

ELECTRICAL CHARACTERISTICS (Tc=25°C unless otherwise noted)

Description	Symbol	Test Condition	Max	Unit
Maximum Instantaneous Forward Voltage Drop	V_F	$V_F = 1.0 \text{ A}$	1.1	V
Maximum Full-Cycle Average Forward Voltage Drop	$V_{F(AV)}$	$I_O = 1.0 \text{ A}, T_A = 75^\circ\text{C}$	0.8	V
Maximum Reverse Current	I_R	at rated VR $T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$	500	μA
Maximum Full-Cycle Average Reverse Current	$I_{R(AV)}$	$I_O = 1.0 \text{ A}, T_A = 75^\circ\text{C}$	30	μA
Junction Capacitance	Cj	$V_R = 4 \text{ V}, f = 1\text{MHz}$	typ 15	pF

1N4001S-7S

STANDARD RECOVERY RECTIFIERS

■ Characteristics Curve

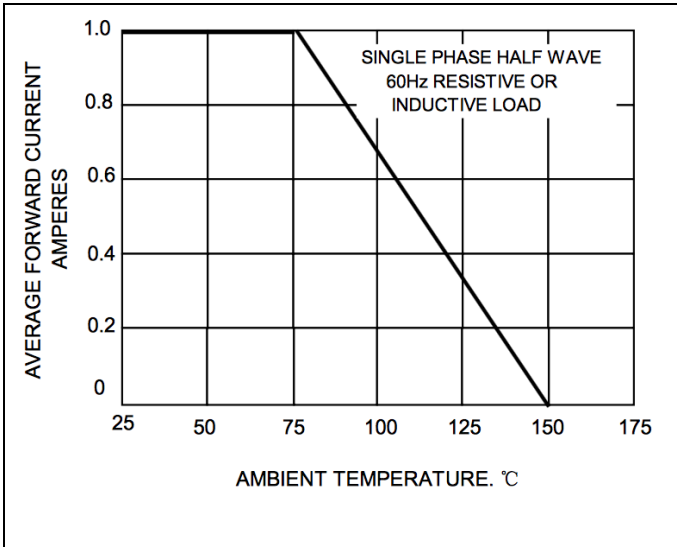


FIG.1-Power Derating Curve

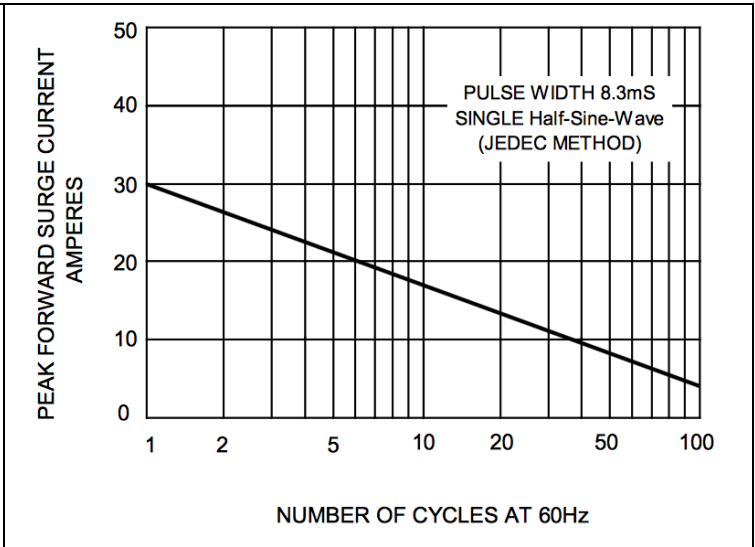


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

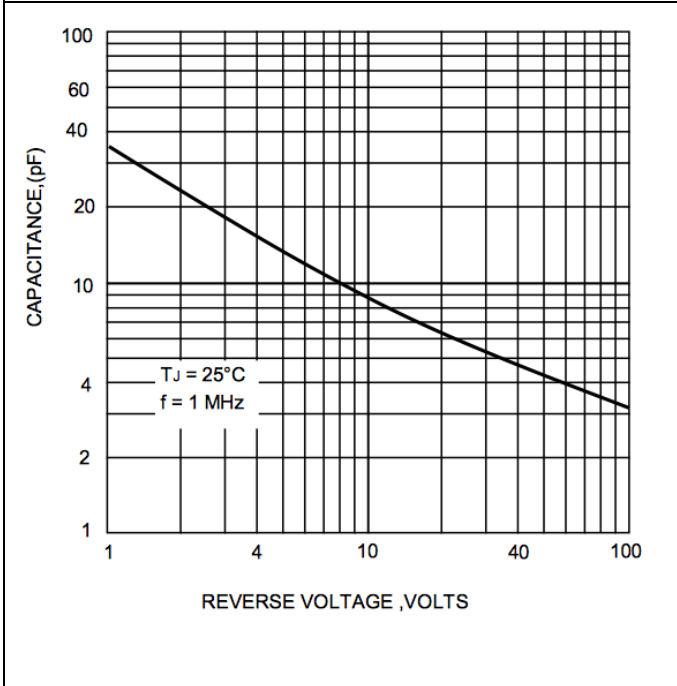


FIG.3-TYPICAL JUNCTION CAPACITANCE

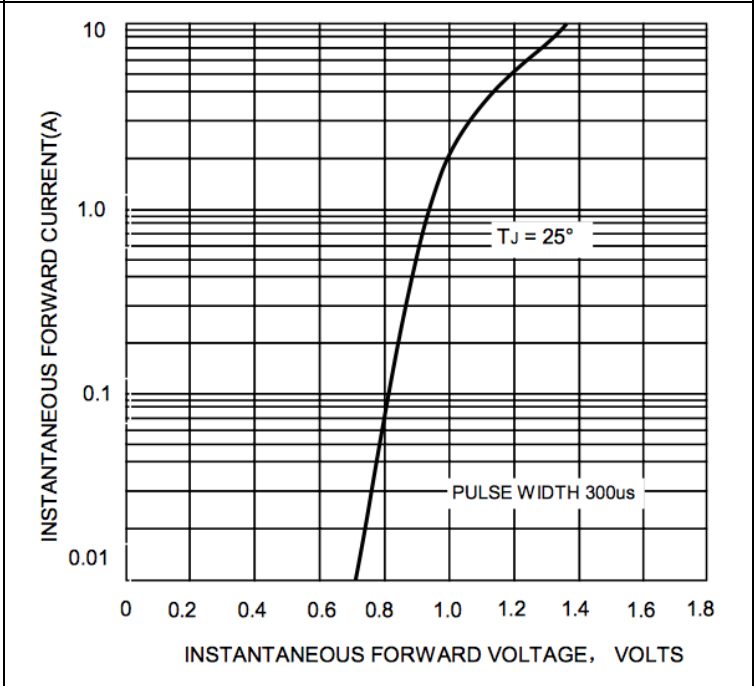


FIG.4-TYPICAL FORWARD CHARACTERISTICS

1N4001S-7S

STANDARD RECOVERY RECTIFIERS

Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Bruckewell Technology Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Bruckewell"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product. Bruckewell makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Bruckewell disclaims

- (i) Any and all liability arising out of the application or use of any product.
- (ii) Any and all liability, including without limitation special, consequential or incidental damages.
- (iii) Any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Bruckewell's knowledge of typical requirements that are often placed on Bruckewell products in generic applications.

Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and/or specifications may vary in different applications and performance may vary over time.

Product specifications do not expand or otherwise modify Bruckewell's terms and conditions of purchase, including but not limited to the warranty expressed therein.