

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

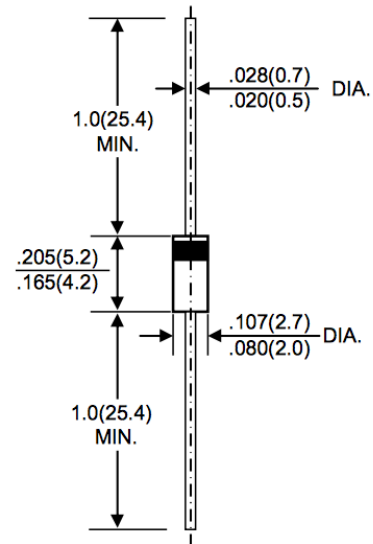
Package type : R1

Packing & Order Information

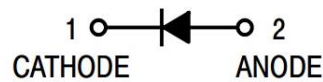
3,000/Reel



RoHS
COMPLIANT



Graphic symbol



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

ABSOLUTE MAXIMUM RATINGS (Tc=25°C)

Parameter	Symbol	1N4001S	1N4002S	1N4003S	1N4004S	1N4005S	1N4006S	1N4007S	Unit
Peak Repetitive Reverse Voltage Working	V _{RRM}	50	100	200	400	600	800	1000	V
Peak Reverse Voltage DC Blocking Voltage	V _{RMW} V _R								
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	I _{FSM}	30							A

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superimposed on rated Load

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	T _{stg}	- 65 to +175							°C
Operating Junction Temperature	T _j	- 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 A	1.1	V
Maximum Full-Cycle Average Forward Voltage Drop	V _{F(AV)}	I _O = 1.0 A, T _a = 75°C	0.8	V
Maximum Reverse Current	I _R	at rated V _R T _A = 25°C T _A = 100°C	500	μA
Maximum Full-Cycle Average Reverse Current	I _{R(AV)}	I _O = 1.0 A, T _a = 75°C	30	μA
Junction Capacitance	C _j	V _R = 4 V, f = 1MHz	typ 15	pF

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■ Characteristics Curve

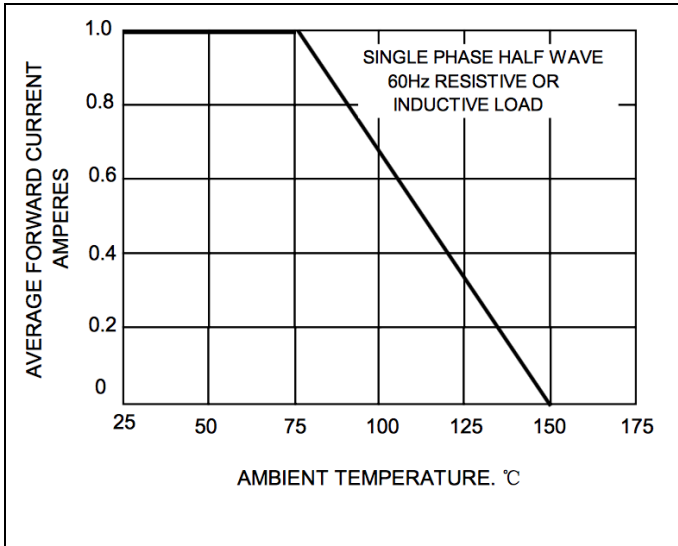


FIG.1-Power Derating Curve

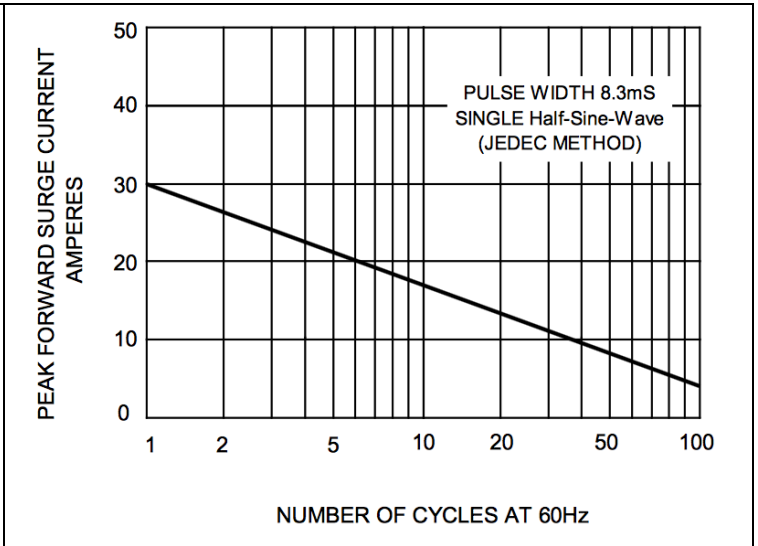


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

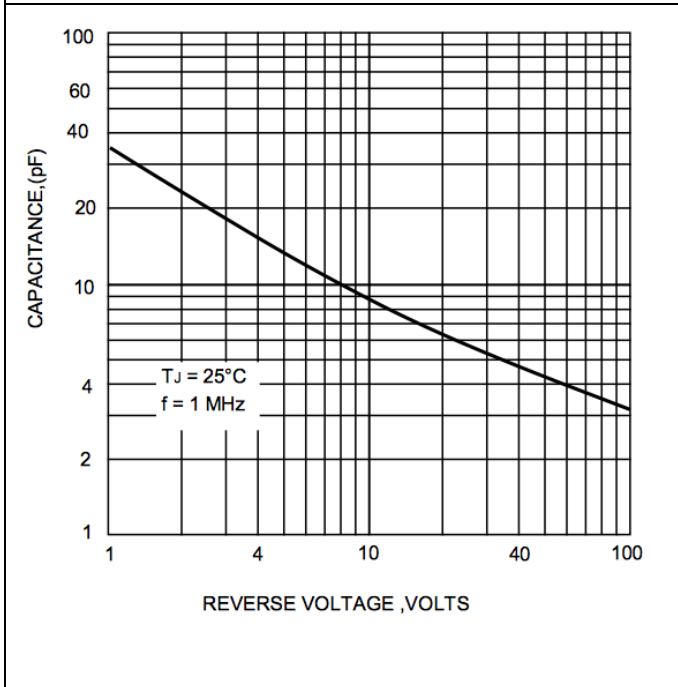


FIG.3-TYPICAL JUNCTION CAPACITANCE

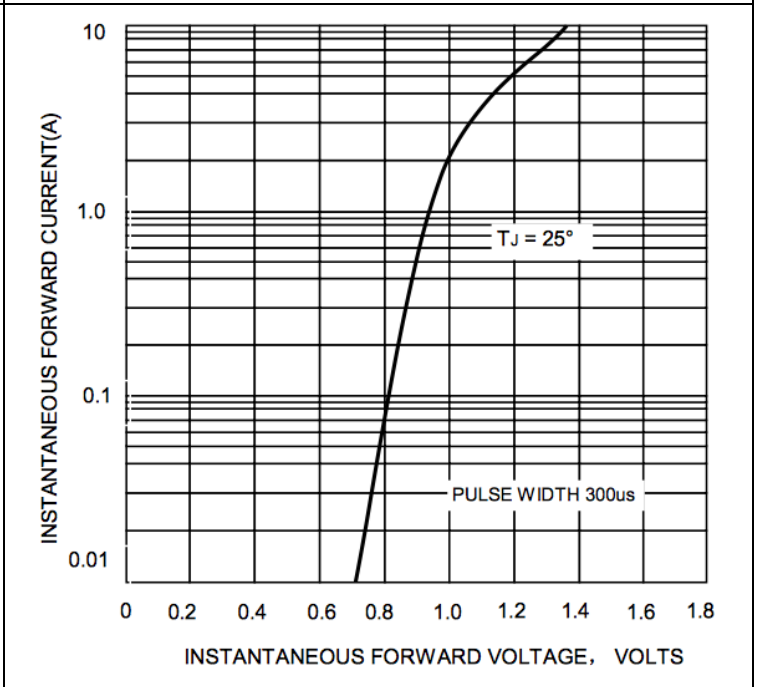


FIG.4-TYPICAL FORWARD CHARACTERISTICS

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