

**STANDARD RECOVERY RECTIFIERS**

**1N4001S - 1N4007S**



**A-405**  
**Axial Lead Plastic**  
**Package**

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

**ABSOLUTE MAXIMUM RATINGS (Ta = 25°C)**

DESCRIPTION	SYMBOL	1N 4001S	1N 4002S	1N 4003S	1N 4004S	1N 4005S	1N 4006S	1N 4007S	UNIT
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$ $V_{RWM}$ $V_R$	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	$I_O$	1.0							A
Non-Repetitive Peak Surge Current 8.3ms single half sine-wave superimposed on rated Load	$I_{FSM}$	30							A
Thermal Resistance from Junction to Ambient in free air	$R_{th(j-a)}$	50							°C/W
Storage Temperature Range	$T_{stg}$	- 65 to +175							°C
Operating Junction Temperature	$T_j$	-65 to +175							°C

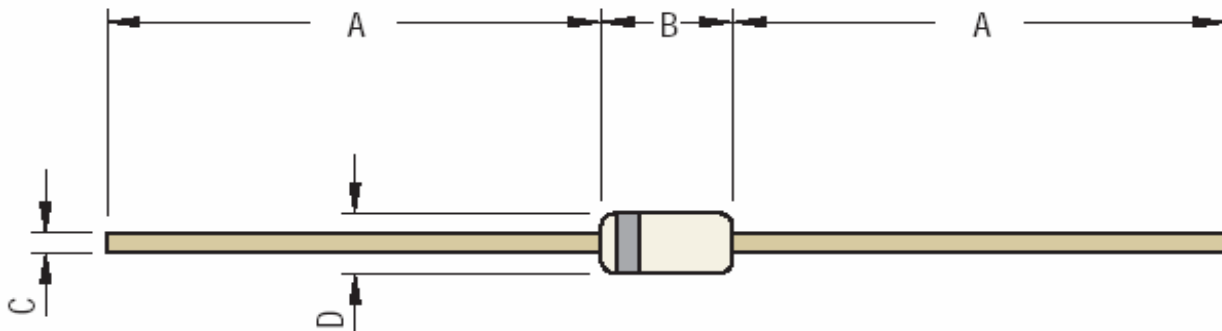
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**ELECTRICAL CHARACTERISTICS (Ta = 25°C unless specified otherwise)**

DESCRIPTION	SYMBOL	TEST CONDITION	MAX	UNIT
Maximum Instantaneous Forward Voltage Drop	$V_F$	$I_F = 1.0A$	1.1	V
Maximum Full-Cycle Average Forward Voltage Drop	$V_{F(AV)}$	$I_O = 1.0A, T_A = 75^\circ C$	0.8	V
Maximum Reverse Current	$I_R$	at rated $V_R$ $T_A = 25^\circ C$ $T_A = 100^\circ C$	5 500	$\mu A$
Maximum Full-Cycle Average Reverse Current	$I_{R(AV)}$	$I_O = 1.0A, T_A = 75^\circ C$	30	$\mu A$
Junction Capacitance	$C_j$	$V_R = 4V, f = 1MHz$	typ 15	pF

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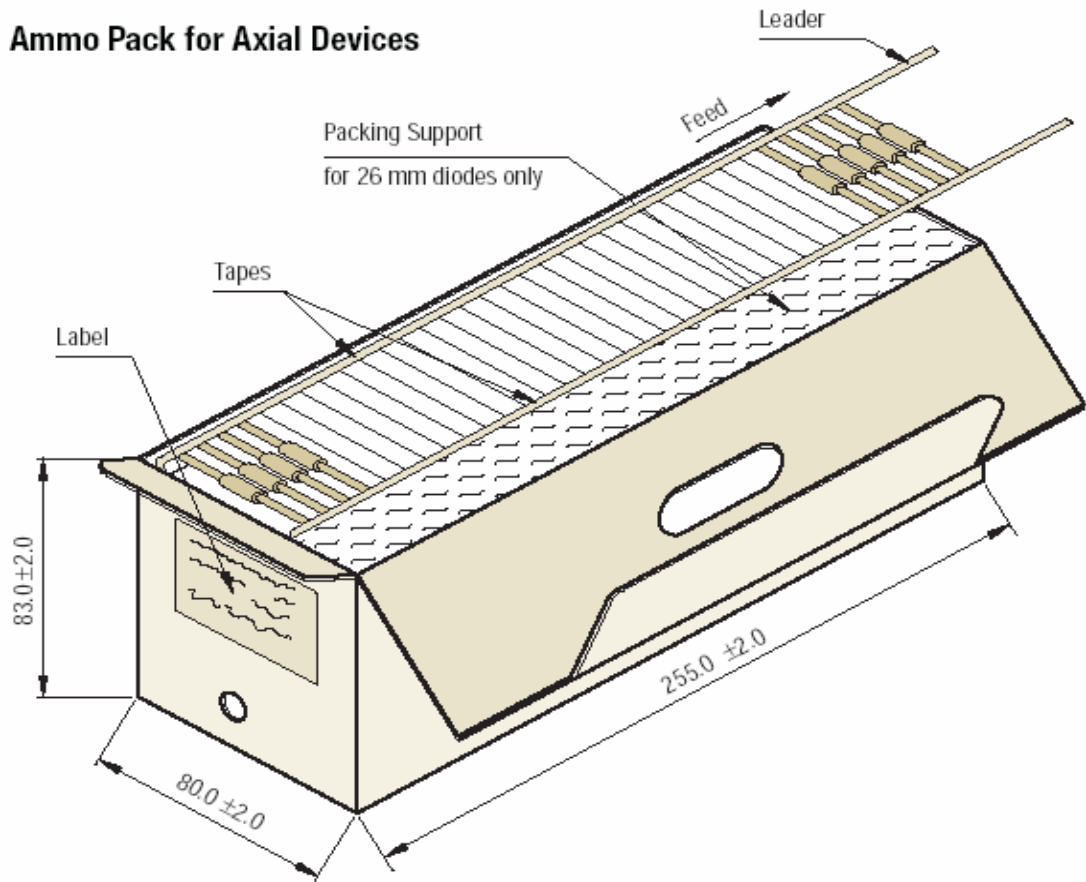


DIM	Min	Max
A	25.40	
B	4.20	5.20
C	0.55	0.65
D	2.30	2.70

All Dimensions are in mm

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**AMMO PACKING FOR A-405**



All Dimensions are in mm

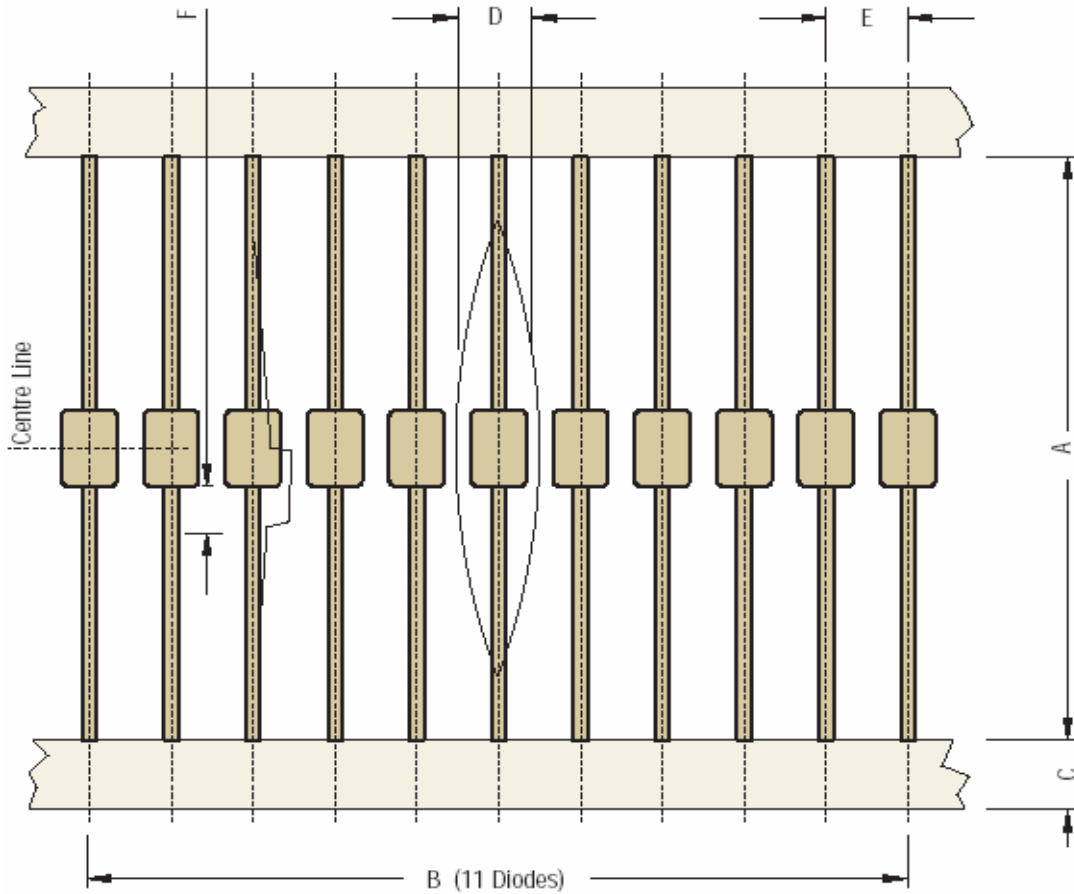
**Packaging Information**

Package/ Case Type	Packaging Type	Std. Packing	Inner Carton			Outer Carton	
		Qty	Qty	Size L x W x H (cm)	Gross Weight (Kg)	Qty	Size L x W x H (cm)
A-405	T&A	5,000	5K	27 x 8 x 14	1.96	45K	46 x 35 x 25

T & A: Tape and Ammo Pack  
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**AXIAL TAPE FOR A-405**



A-405 52 mm Tape		
DIM	Min	Max
A	50.0	54.0
B	95.0	105.0
C	5.60	6.50
D		1.5R
E	9.50	10.50
F		1.25

**All Dimensions are in mm**

**TAPE SPECIFICATIONS**

1. 300 mm (Min) leader tape on every roll.
2. No. of empty places allowed 0.25% without consecutive empty places.
3. Ends of leads shall normally not protrude beyond the tapes.
4. Components shall be held sufficiently in the tape or tapes so that they can not come free in normal handling.

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**Component Disposal Instructions**

1. CDIL Semiconductor Devices are RoHS compliant, customers are requested to please dispose as per prevailing Environmental Legislation of their Country.
2. In Europe, please dispose as per EU Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE).

**Customer Notes**

**Disclaimer**

The product information and the selection guides facilitate selection of the CDIL's Semiconductor Device(s) best suited for application in your product(s) as per your requirement. It is recommended that you completely review our Data Sheet(s) so as to confirm that the Device(s) meet functionality parameters for your application. The information furnished in the Data Sheet and on the CDIL Web Site/CD are believed to be accurate and reliable. CDIL however, does not assume responsibility for inaccuracies or incomplete information. Furthermore, CDIL does not assume liability whatsoever, arising out of the application or use of any CDIL product; neither does it convey any license under its patent rights nor rights of others. These products are not designed for use in life saving/support appliances or systems. CDIL customers selling these products (either as individual Semiconductor Devices or incorporated in their end products), in any life saving/support appliances or systems or applications do so at their own risk and CDIL will not be responsible for any damages resulting from such sale(s). CDIL strives for continuous improvement and reserves the right to change the specifications of its products without prior notice.



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