

SCHOTTKY BARRIER RECTIFIERS



**1N5817 - 1N5818
1N5819
DO-41 (Plastic)
Axial Lead Plastic
Package**

Suited for use as Rectifiers in Low Voltage, High Frequency Inverters, Free Wheeling Diodes and Polarity Protection Diodes

MAXIMUM RATINGS

DESCRIPTION	SYMBOL	1N5817	1N5818	1N5819	UNIT
Peak Repetitive Reverse Voltage	V_{RRM}				
Working Peak Reverse Voltage	V_{RWM}	20	30	40	V
DC Blocking Voltage	V_R				
Non-Repetitive Peak Reverse Voltage	V_{RSM}	24	36	48	V
RMS Reverse Voltage	$V_{R(RMS)}$	14	21	28	V
*Average Rectified Forward Current ($V_R(\text{equiv}) \leq 0.2V V_R(\text{dc}), T_L=90^\circ\text{C}$ $R_{th(j-a)}=80^\circ\text{C/W}$, P.C Board Mounting, see **, $T_a=55^\circ\text{C}$)	I_O	1.0			A
Ambient Temperature (Rated $V_R(\text{dc}), P_{F(AV)}=0$, $R_{th(j-a)}=80^\circ\text{C/W}$)	T_a	85	80	75	$^\circ\text{C}$
Non-Repetitive Peak Surge Current (surge applied at rated load conditions, half - wave, single phase 60Hz, $T_L=70^\circ\text{C}$)	I_{FSM}	25 (for one cycle)			A
Operating and Storage Junction Temperature Range	T_j, T_{stg}	- 65 to +125			$^\circ\text{C}$
Peak Operating Junction Temperature (forward current applied)	$T_{j(pk)}$	150			$^\circ\text{C}$

*THERMAL CHARACTERISTICS

Thermal Resistance from Junction to Ambient in free air	$R_{th(j-a)}$	80	$^\circ\text{C/W}$
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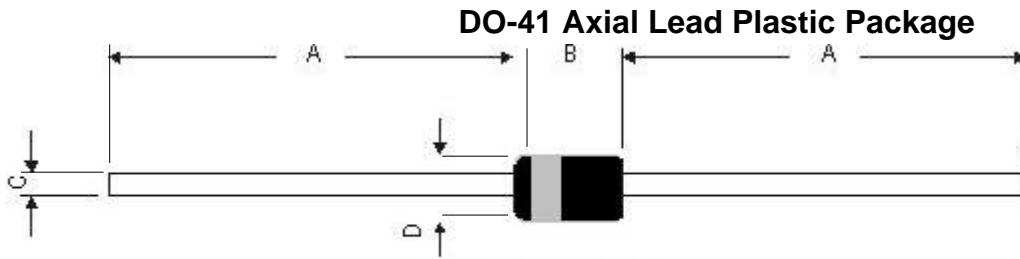
ELECTRICAL CHARACTERISTICS ($T_L=25^\circ\text{C}$ unless specified otherwise)*

DESCRIPTION	SYMBOL	TEST CONDITION	1N5817	1N5818	1N5819	UNIT
Maximum Instantaneous Forward Voltage Drop	$**V_F$	$I_F=0.1\text{A}$	0.32	0.330	0.34	V
		$I_F=1.0\text{A}$	0.45	0.550	0.60	V
		$I_F=3.0\text{A}$	0.75	0.875	0.90	V
Maximum Instantaneous Reverse Current	$**I_R$	@ rated V_R $T_L=25^\circ\text{C}$	1			mA
		$T_L=100^\circ\text{C}$	10			mA

*Lead temperature reference is cathode lead 1/32" from case

** Pulse test: Pulse width=300ms, Duty cycle=2%

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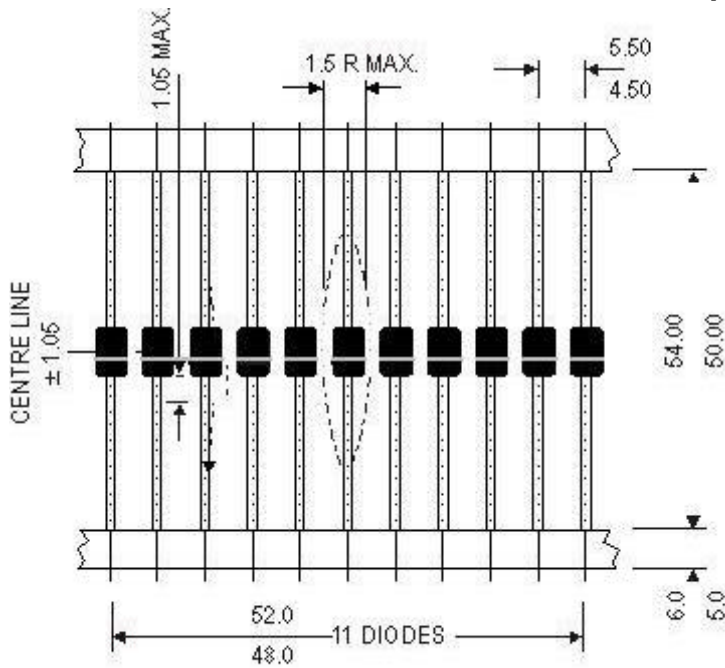


DIM	MIN	MAX
A	27.90	—
B	4.05	5.20
C	0.75	0.87
D	2.30	2.70

All dimensions are in mm.

NOTE: Cathode is marked by Band.

DO-41, 52mm Taping Specification



All dimensions are in mm.

52 mm Taping Specification

1. T & A indicates Axial Tape and Ammo Packing (52 mm Tape Spacing).
2. 300 mm (min) leader tape on every tape.
3. No. of empty places allowed 0.25% without consecutive empty places.
4. Ends of leads shall preferably not protrude beyond the tapes.
5. Components shall be held sufficiently in the tape or tapes so that they can not come free in normal handling.

Packing in Ammo Pack: 5000 pcs./Ammo Pack

Disclaimer

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