

SENSITRON **SEMICONDUCTOR**

JAN
JANTX
JANTXV

1N5807 / US
1N5809 / US
1N5811 / US

TECHNICAL DATA
DATA SHEET 127, REV F

HIGH EFFICIENTCY AXIAL LEAD RECTIFIERS

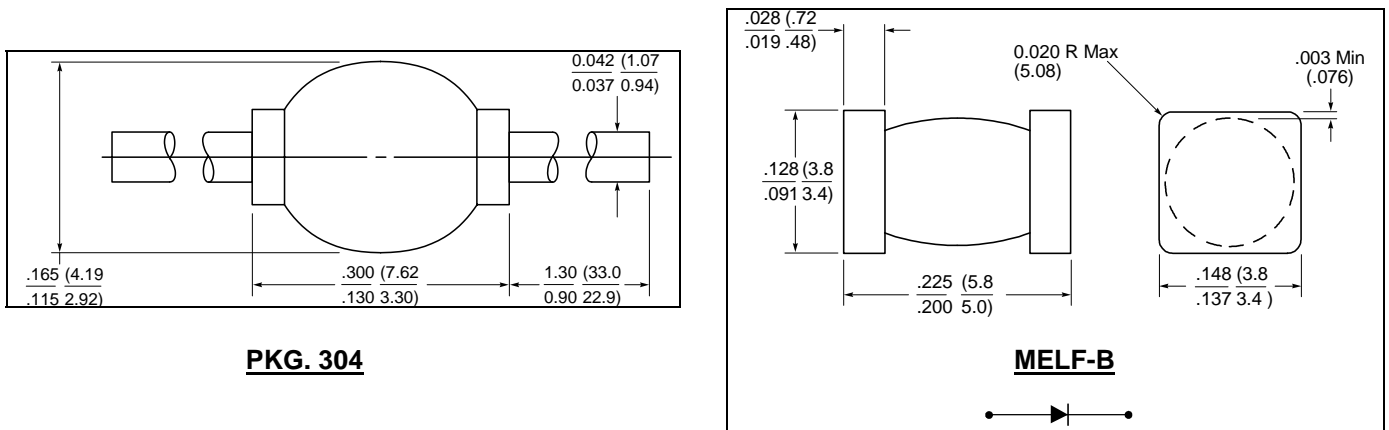
DESCRIPTION: 50 / 100 / 150 VOLT, 3.0 AMP, 30 NANOSECOND RECTIFIER

MAX. RATINGS / ELECTRICAL CHARACTERISTICS All ratings are at $T_A = 25^\circ\text{C}$ unless otherwise specified.

RATING	CONDITIONS	MIN	TYP	MAX	UNIT
Peak Inverse Voltage (PIV) 1N5807 / US 1N5809 / US 1N5811 / US	-	-	-	50 100 150	Vdc
Average DC Output Current (I_o)	$T = +55^\circ\text{C}$	-	-	3.0	Amps
Peak Single Cycle Surge Current (I_{FSM})	$t_p = 8.3$ ms Single Half Cycle Sine Wave, Superimposed On Rated Load	-	-	125	Amps(pk)
Operating and Storage Temp. (T_{op} & T_{stg})	-	-65	-	+175	$^\circ\text{C}$
Maximum Forward Voltage (V_f)	$I_f = 4.0\text{A}$ $I_f = 6.0\text{A}$ (300 μsec pulse, duty cycle < 2%)	-	-	.875 .925	Volts
Maximum Instantaneous Reverse Current At Rated (PIV)	$T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$	-	-	5.0 150	μAmps
Reverse Recovery Time (t_{rr})	$I_f = 0.5\text{A}$, $I_r = 1.0\text{A}$, $I_{rr} = 0.25\text{A}$	-	-	30	nsec
Thermal Resistance (θ_{JL}) (Axial)	$d = 0.375''$	-	-	22	$^\circ\text{C/W}$
Thermal Resistance (θ_{JEC}) (MELF)	Junction to End Caps	-	-	8.0	$^\circ\text{C/W}$

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MECHANICAL DIMENSIONS In Inches / (mm), min./max.



Note: The cathode side is marked with a dark colored band on one side of the diode body.

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