SENSITRON
SEMICONDUCTOR

1N5415,US
1N5416,US
1N5417,US
1N5418,US
1N5419,US
1N5420,US

TECHNICAL DATA
DATA SHEET 125, REV D

JAN	**SJ**
JANTX	**SX**
JANTXV	**SV**

HIGH CURRENT AXIAL LEAD/SURFACE MOUNT RECTIFIERS

- Hermetic, non-cavity glass package
- Metallurgically bonded
- Manufacture & screen to JANS per MIL-PRF-19500/411 using Sensitron specification, 7700-409X
- Physical dimensions: Axial lead similar to DO-35 and surface mount similar to D-5

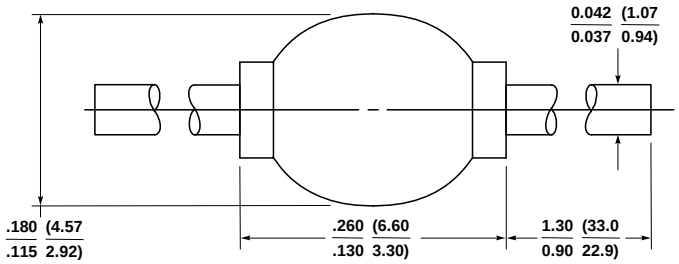
DESCRIPTION: 400 VOLT, 3.0 AMP, 150 NANOSECOND RECTIFIER

MAX. RATINGS / ELECTRICAL CHARACTERISTICS All ratings are at $T_A = 25^oC$ unless otherwise specified.

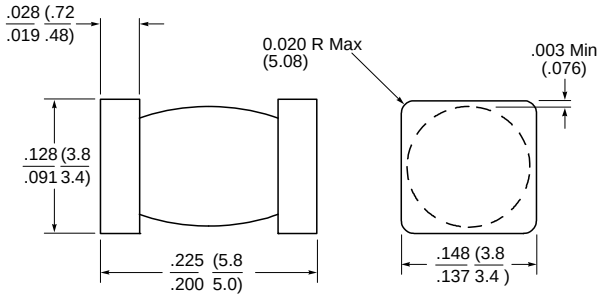
RATING	CONDITIONS	MIN	TYP	MAX	UNIT
Peak Inverse Voltage (PIV) 1N5415,US 1N5416,US 1N5417,US 1N5418,US 1N5419,US 1N5420,US	-	-	-	 50 100 200 400 500 600	Vdc
Average DC Output Current (I_o)	$T_A = +55^oC$	-	-	3.0	Amps
Peak Single Cycle Surge Current (I_{fsm})	t_p = 8.3 ms Single Half Cycle Sine Wave, Superimposed On Rated Load	-	-	80	Amps(pk)
Operating and Storage Temp. (T_{op} & T_{stg})	-	-65	-	+175	°C
Maximum Forward Voltage (V_f) 1N5415/US, 1N5416,US 1N5417,US, 1N5418,US 1N5419/US, 1N5420,US	I_f = 9.0A (300 μsec pulse, duty cycle < 2%)	-	-	 1.6 1.7 1.8	Volts
Maximum Instantaneous Reverse Current At Rated (PIV)	$T_A = 25°$ C $T_A = 100°$ C	-	-	1.0 20	μAmps
Reverse Recovery Time (t_{rr}) 1N5415/US, 1N5416,US 1N5417,US, 1N5418,US 1N5419/US, 1N5420,US	I_f = 0.5A, I_r = 1.0A, I_{rr} = 0.25A	-	-	 150 150 250 400	nsec
Thermal Resistance (θ_{JL})	d = 0.375”	-	-	22	° C/W
Thermal Resistance (θ_{JC})	L=0 for US versions	-	-	6.5	° C/W

TECHNICAL DATA
DATA SHEET 125, REV D

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



PKG. 301



MELF-B

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