

# KNOX SEMICONDUCTOR, INC.

These low level zener diodes are designed for use at low current levels. They feature sharp knees, low leakage, low impedance, and low noise. The devices are available in the DO-7 glass package and in die form.

## LOW VOLTAGE AVALANCHE ZENER DIODES HIGH PERFORMANCE: LOW NOISE, LOW LEAKAGE

### 1N6082 - 1N6091 LVA343A - LVA3100A

JEDEC NUMBER (NOTE 1)	LVA TYPE	NOMINAL ZENER VOLTAGE Vz @ Izt (VOLTS)	TEST CURRENT Izt (mA)	MAX ZENER IMPEDANCE (NOTE 2) Zzt @ Izt (OHMS)	MAX REVERSE LEAKAGE CURRENT		MAX NOISE DENSITY AT (NOTE 3) Iz = 250 $\mu$ A (ND $\mu$ V / $\sqrt$ Hz)	MAX REGULATION FACTOR (NOTE 4)	
					Ir ( $\mu$ Adc)	Vr (VOLTS)		$\Delta$ Vz (VOLTS)	IzL (mAdc)
1N6082	LVA343A	4.3	20	18	2.0	1.5	1.0	0.75	2.0
1N6083	LVA347A	4.7	10	10	2.0	2.0	1.0	0.50	1.0
1N6084	LVA351A	5.1	5	10	2.0	3.0	1.0	0.30	0.25
1N6085	LVA356A	5.6	1	40	2.0	4.5	1.0	0.10	0.05
1N6086	LVA362A	6.2	1	45	0.5	5.6	1.0	0.10	0.01
1N6087	LVA368A	6.8	1	50	0.05	6.2	1.0	0.10	0.01
1N6088	LVA375A	7.5	1	50	0.01	6.8	1.0	0.10	0.01
1N6089	LVA382A	8.2	1	60	0.01	7.5	1.0	0.10	0.01
1N6090	LVA391A	9.1	1	60	0.01	8.2	2.0	0.10	0.01
1N6091	LVA3100A	10.0	1	60	0.01	9.1	2.0	0.10	0.01

#### NOTES:

- Suffix denotes Vz tolerance: non suffix for  $\pm 20\%$ , A for  $\pm 10\%$ , B for  $\pm 5\%$ , C for  $\pm 2\%$ , D for  $\pm 1\%$ .
- Measures with 10%, 60 Hz AC superimposed on Izt.
- Measured from 1000 to 3000 Hz.
- Difference between Vz at Izt and IzL.
- Vf @ 200mA = 1.2V Max.
- Power rating is 400 mW @ 25°C, derate linearly to zero @ 175°C
- Package Style DO-7