

KNOX SEMICONDUCTOR, INC.

A unique manufacturing process allows Knox Semiconductor to supply a range of Very Low Voltage Diodes having the lowest reverse leakage currents and low impedance at currents specified at 10 mA and below. These devices will find use in applications where conservation of battery life is a primary concern.

LOW LEVEL ZENER DIODES VERY LOW VOLTAGE, LOW LEAKAGE K120 - K510

TYPE NUMBER	NOMINAL ZENER VOLTAGE V_z @ $I_z = 10$ mA (Vdc)	DYNAMIC IMPEDANCE		REVERSE CURRENT @ 25° C	
		MAX Z_z @ $I_z = 10$ mA (OHMS)	MAX Z_{zk} @ $I_z = 1$ mA (OHMS)	MAX I_r (μ A)	V_r (Vdc)
K120	1.2	20	110	.05	0.4
K150	1.5	20	110	.05	0.5
K180	1.8	20	110	.05	0.7
K210	2.1	20	110	.05	0.9
K240	2.4	20	110	.05	1.2
K270	2.7	20	110	.05	1.7
K300	3.0	20	110	.05	1.9
K330	3.3	20	110	.05	2.2
K360	3.6	20	110	.05	2.5
K390	3.9	20	110	.05	2.7
K430	4.3	23	135	.05	3.1
K470	4.7	23	135	.05	3.5
K510	5.1	23	135	.05	3.7

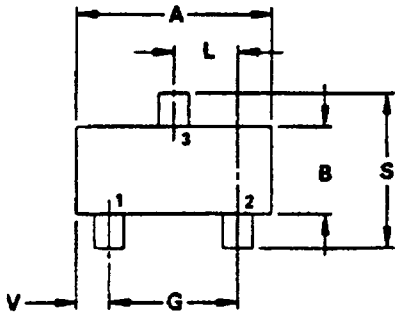
MAXIMUM RATINGS

Package Style		DO-7
DC Power Dissipation	@ $T_a = 50^\circ$ C	250 mW
Operating Temperature (T_{opr})		-65 to +175° C
Storage Temperature (T_{stg})		-65 to +200° C
Voltage Tolerance:	Standard Device	±10%
	Suffix A	± 5%

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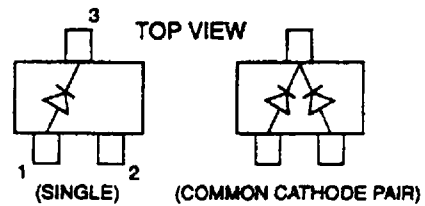
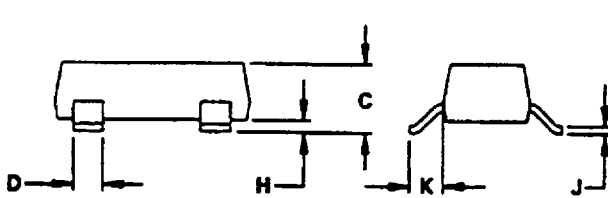
PLASTIC SURFACE MOUNT

SOT-23

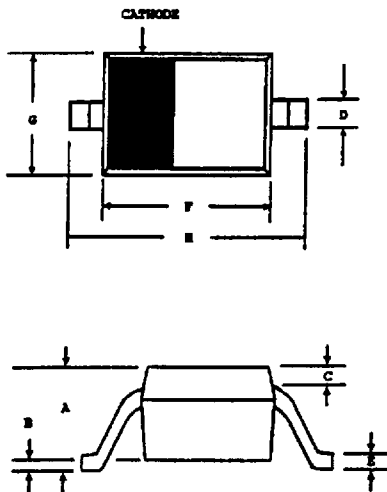


Dim	Millimeters		Inches	
	Min	Max	Min	Max
A	2.80	3.06	0.110	0.120
B	1.20	1.40	0.047	0.055
C	0.85	1.20	0.033	0.047
D	0.37	0.45	0.015	0.018
G	1.78	2.04	0.070	0.080
H	0.10	0.25	0.004	0.010
J	0.086	0.152	0.003	0.006
K	0.45	0.60	0.018	0.024
L	0.89	1.02	0.035	0.040
S	2.10	2.50	0.083	0.098
V	0.45	0.60	0.018	0.024

Configuration



SOD 323

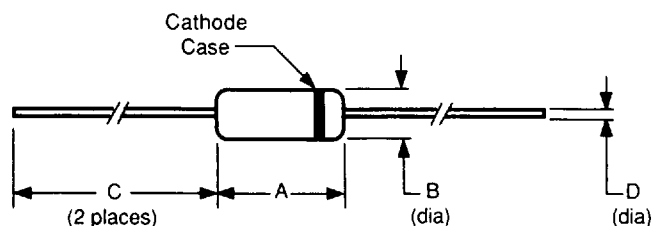


Dim	Millimeters		Inches	
	Min	Max	Min	Max
A	—	1.10	0.034	0.043
B	—	0.10	0.003	0.004
C	—	0.20	0.006	0.010
D	0.25	0.40	0.010	0.016
E	0.08	0.15	0.003	0.006
F	1.60	1.90	0.063	0.075
G	1.15	1.45	0.045	0.057
H	2.30	2.70	0.094	0.106

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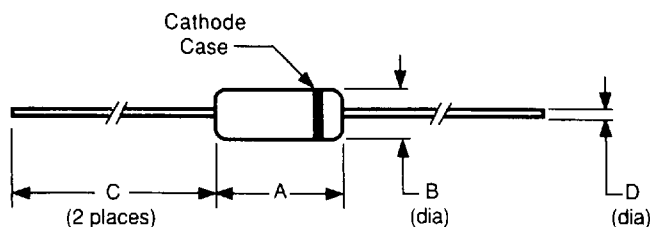
GLASS PACKAGES

DO-7



Dim	Millimeters		Inches	
	Min	Max	Min	Max
A	5.84	7.62	0.230	0.300
B	2.16	2.72	0.085	0.107
C	25.40	-----	1.000	-----
D	0.46	0.56	0.018	0.022

DO-35



Dim	Millimeters		Inches	
	Min	Max	Min	Max
A	3.25	3.75	0.130	0.150
B	1.73	1.93	0.068	0.076
C	25.40	-----	1.000	-----
D	0.46	0.56	0.018	0.022