

# KNOX SEMICONDUCTOR, INC.

## GENERAL PURPOSE ABRUPT TUNING DIODES 1N4786 - 1N4815

TYPE NUMBER	CAPACITANCE @ - 4 Vdc 1MHz (pF)	CAPACITANCE RATIO 0.1 V TO 4 V		CAPACITANCE RATIO MWV TO 4 V		MAX WORKING VOLTAGE (Vdc)	MIN BREAKDOWN VOLTAGE $I_r = 100\mu A$ (Vdc)
		MIN	MAX	MIN	MAX		
1N4786	6.8	2.40	2.56	0.462	0.482	25	28
1N4787	8.2	2.42	2.58	0.455	0.473	25	28
1N4788	10.0	2.34	2.50	0.443	0.461	25	28
1N4789	12.0	2.35	2.49	0.441	0.457	25	28
1N4790	15.0	2.37	2.49	0.438	0.448	25	28
1N4791	18.0	2.36	2.48	0.487	0.497	20	22
1N4792	22.0	2.35	2.46	0.487	0.497	20	22
1N4793	27.0	2.35	2.46	0.486	0.496	20	22
1N4794	33.0	2.35	2.46	0.485	0.495	20	22
1N4795	39.0	2.34	2.46	0.483	0.494	20	22
1N4796	47.0	2.33	2.43	0.483	0.492	20	22
1N4797	56.0	2.32	2.42	0.551	0.561	15	17
1N4798	68.0	2.30	2.40	0.551	0.561	15	17
1N4799	82.0	2.26	2.36	0.549	0.558	15	17
1N4800	100.0	2.24	2.33	0.547	0.553	15	17
1N4801	6.8	2.40	2.56	0.260	0.285	100	110
1N4802	8.2	2.42	2.58	0.263	0.283	100	110
1N4803	10.0	2.34	2.50	0.242	0.262	100	110
1N4804	12.0	2.35	2.49	0.242	0.259	100	110
1N4805	15.0	2.37	2.49	0.242	0.256	100	110
1N4806	18.0	2.36	2.48	0.242	0.254	90	99
1N4807	22.0	2.35	2.46	0.241	0.252	90	99
1N4808	27.0	2.35	2.46	0.276	0.285	65	72
1N4809	33.0	2.35	2.46	0.287	0.295	60	66
1N4810	39.0	2.34	2.44	0.300	0.306	55	61
1N4811	47.0	2.33	2.43	0.313	0.320	50	55
1N4812	56.0	2.32	2.42	0.348	0.354	40	44
1N4813	68.0	2.30	2.40	0.398	0.404	30	33
1N4814	82.0	2.26	2.36	0.477	0.483	20	22
1N4815	100.0	2.24	2.33	0.478	0.484	20	22

### MAXIMUM RATINGS

Package Style		DO-7
DC Power Dissipation (Pd)	@ $T_a = 25^\circ C$	500 mW
Forward Voltage Drop	@ $I_f = 100 \text{ mA}$	1.0 Vdc
Quality Factor (Q)	$V_r = 4 \text{ Vdc}; f = 1 \text{ mhz}$	750 min
	$V_r = 4 \text{ Vdc}; f = 50 \text{ Mhz}$	15 min
Reverse Current ( $I_r$ )	@MWV	5nA
Reverse Current ( $I_r$ )	@MWV ( $150^\circ C$ )	5 $\mu A$
Operating Temperature ( $T_{opr}$ )		-65 to + 150 $^\circ C$
Storage Temperature ( $T_{stg}$ )		-65 to + 150 $^\circ C$
Capacitance Tolerance:	Standard	$\pm 20\%$
	Suffix A	$\pm 10\%$
	Suffix B	$\pm 5\%$