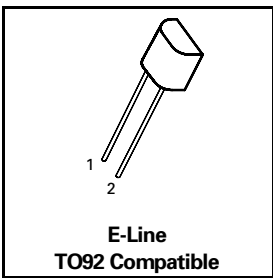
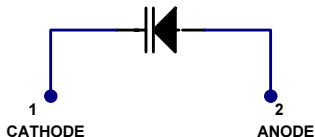


SILICON ION-IMPLANTED HYPERABRUPT TUNER DIODES

ISSUE 2 – MARCH 94

ZC820 SERIES

DIODE PIN CONNECTION



ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	MAX	UNIT
Reverse Voltage	V_R	25	V
Forward Current	I_F	200	mA
Power Dissipation at $T_{amb}=25^\circ\text{C}$	P_{tot}	300	mW
Junction Temperature	T_j	125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 to +200	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS (at $T_{amb}=25^\circ\text{C}$)

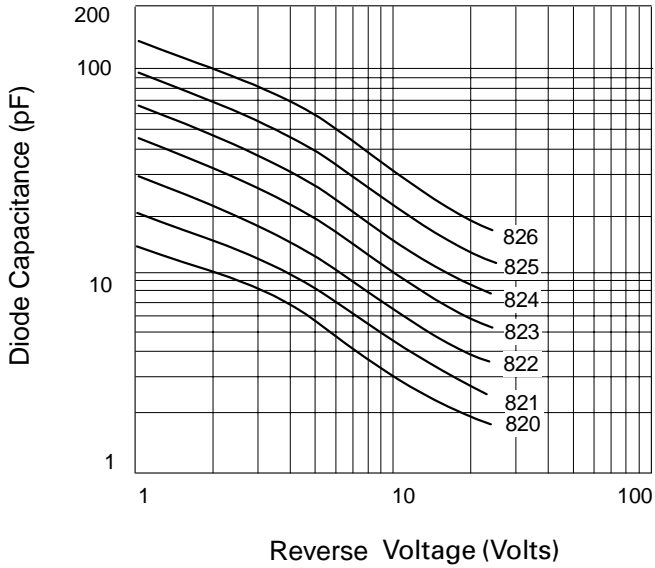
PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT	CONDITIONS
Reverse Voltage Leakage	I_R			0.02	μA	
Temperature Coefficient of Capacitance	η		0.03	0.04	$\%/\text{C}$	$V_R=3\text{V}$

TUNING CHARACTERISTICS (at $T_{amb}=25^\circ\text{C}$)

PART NO	Nominal Capacitance in pF @ $V_R=2\text{V}$, $f=1\text{MHz}$			Minimum Q @ $V_R=3\text{V}$ $f=50\text{MHz}$	Capacitance Ratio C_2/C_{20} at $f=1\text{MHz}$	
	MIN	NOM	MAX		MIN	MAX
ZC820	8	10	12	300	5	6.5
ZC821	12	15	18	300	5	6.5
ZC822	17.6	22	26.4	200	5	6.5
ZC823	26.4	33	39.6	200	5	6.5
ZC824	37.6	47	56.4	200	5	6.5
ZC825	54.4	68	81.6	100	5	6.5
ZC826	80	100	120	100	5	6.5

*Available with 2V nominal capacitance ± 10 suffix A, $\pm 5\%$ suffix B

ZC820 SERIES



Diode Capacitance