

SOD323 SILICON HYPERABRUPT VARIABLE CAPACITANCE DIODES

ZMV930 SERIES

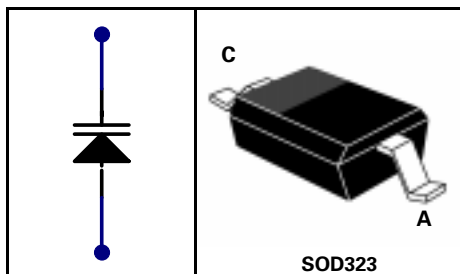
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FEATURES

- * VHF Tuning
- * Octave Tuning from 0 TO 6 Volts
- * High Reliability and Low Parasitics
- * Low Leakage (Typically <200pA at 10V)
- * Miniature Surface Mount Package

APPLICATIONS

- * Mobile Radios and Pagers
- * Cellular Telephones



ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	VALUE	UNIT
Reverse Voltage	V_R	12	V
Forward Current	I_F	100	mA
Power Dissipation at $T_{amb}=25^{\circ}C$	P_{tot}	330	mW
Junction Temperature	T_j	125	$^{\circ}C$
Storage Temperature	T_{stg}	-55 to 150	$^{\circ}C$

*Maximum power dissipation is calculated assuming that the device is mounted on a ceramic substrate measuring 10 x 8 x 0.6mm

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

PARAMETER	SYMBOL	MIN	MAX	UNIT	CONDITIONS
Breakdown Voltage	V_{BR}	12		Volts	$I_R=10\mu A$
Reverse Leakage	I_R		100	nA	$V_R=8V$

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

Type	Capacitance @ $V_R=1V$	Capacitance @ $V_R=2.5 V$		Capacitance @ $V_R=4 V$	Figure of merit minimum Q $V_R=4 V$, $f=50MHz$	Part- mark
	Min. pF	Min. pF	Max. pF	Max. pF		
ZMV930	8.70	4.30	5.50	2.90	200	AH
ZMV931	14.50	6.50	7.80	4.00	300	AJ
ZMV932	17.00	8.50	10.50	5.50	200	AK
ZMV933	42.00	18.00	27.00	12.00	150	AL
ZMV933A	42.00	20.25	24.75	12.00	150	AM
ZMV934	95.00	40.00	65.00	25.00	80	AN
ZMV934A	95.00	47.25	57.75	25.00	80	AO

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TYPICAL CHARACTERISTICS

