

# SOT23 SILICON PLANAR VARIABLE CAPACITANCE DIODES

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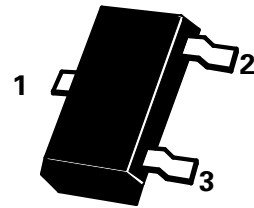


**FMMV2101  
to  
FMMV2109**

PIN CONFIGURATION



PARTMARKING DETAILS  
SEE TUNING CHARACTERISTICS



SOT23

## ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Reverse Voltage	$V_R$	30	V
Forward Current	$I_F$	200	mA
Power Dissipation at $T_{amb}=25^\circ\text{C}$	$P_{tot}$	330	mW
Operating and Storage Temperature Range	$T_j:T_{stg}$	-55 to +150	$^\circ\text{C}$

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

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Reverse Breakdown Voltage	$V_{BR}$	30			V	$I_R = 10\mu\text{A}$
Reverse current	$I_R$			20	nA	$V_R = 25\text{V}$
Series Inductance	$L_S$		3.0		nH	$f=250\text{MHz}$ Lead length $\approx 1.5\text{mm}$
Diode Capacitance Temperature Coefficient	$T_{CC}$		280	400	ppm/ $^\circ\text{C}$	$V_R = 4\text{V}$ , $f=1\text{MHz}$ Lead length $\approx 1.5\text{mm}$
Case Capacitance	$C_C$		0.15		pF	$f=1\text{MHz}$

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

Type No.	Nominal Capacitance (pF) $V_R = 4\text{V}$ , $f=1\text{MHz}$			Q – Figure of MERIT $V_R = 4\text{V}$ , $f=50\text{MHz}$	Turning Ratio $C_2 / C_{30}$ $f=1\text{MHz}$		Partmark Detail
	Min.	Nom.	Max.		Min.	Max.	
FMMV2101	6.1	6.8	7.5	450	2.5	3.3	6R
FMMV2103	9.0	10.0	11.0	400	2.6	3.3	6G
FMMV2104	10.8	12.0	13.2	400	2.6	3.3	6H
FMMV2105	13.5	15.0	16.5	400	2.6	3.3	6J
FMMV2107	19.8	22.0	24.2	350	2.7	3.3	6L
FMMV2108	24.3	27.0	29.7	300	2.7	3.3	6M
FMMV2109	29.3	33.0	36.3	280	2.7	3.3	6N

\* SELECTED DEVICE RANGE OFFERED ONLY