

SOT23 SILICON PLANAR VARIABLE CAPACITANCE DIODES

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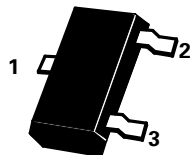


FMMV2101 to FMMV2109

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