

**SOT23 SILICON PLANAR  
VARIABLE CAPACITANCE DIODE**

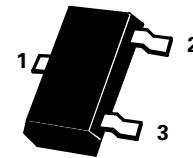
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**FMMV3102**

PIN CONFIGURATION



PARTMARKING DETAIL  
FMMV3102 – 4C



SOT23

**ABSOLUTE MAXIMUM RATINGS.**

PARAMETER	SYMBOL	VALUE	UNIT
Power Dissipation at $T_{amb}=25^{\circ}C$	$P_{tot}$	330	mW
Operating and Storage Temperature Range	$T_j; T_{stg}$	-55 to +150	°C

**ELECTRICAL CHARACTERISTICS (at  $T_{amb} = 25^{\circ}C$  unless otherwise stated).**

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Reverse Breakdown Voltage	$V_{BR}$	30			V	$I_R = 10\mu A$
Reverse current	$I_R$			10	nA	$V_R = 25V$
Series Inductance	$L_S$		3.0		nH	f=250MHz
Diode Capacitance Temperature Coefficient	$T_{CC}$		280		ppm/ °C	$V_R = 3V, f=1MHz$
Case Capacitance	$C_C$		0.1		pF	f=1MHz

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

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Diode Capacitance	$C_d$	20		25	pF	$V_R = 3V, f=1MHz$
Capacitance Ratio	$C_d / C_d$	4.5				$V_R = 3V/25V, f=1MHz$
Figure of MERIT	Q	200	300			$V_R = 3V, f=50MHz$

Spice parameter data is available upon request for this device