



**Surface Mount 2042 / 2041 SERIES Varactor
HYPERABRUPT TUNING DIODES
VHF AND UHF FREQUENCIES**

- Superior Performance in Highly Stable Oscillator Designs
- Uniform Capacitance / Temperature Coefficient
- Highly Reproducible Ion Implanted Structure

PART NUMBER ◆◆◆	C _T @ 2.5 VOLT (pF)		C _T @ 1V / C _T @ 2.5V RATIO		C _T @ 2.5V / C _T @ 4V RATIO		Q @ 4VOLTS 50 MHz	AVAILABLE IN THE FOLLOWING PACKAGES
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	
SMV20422	18	27	1.8	2.5	1.8	2.5	150	-01, -06, -07, -08, -09, -10
SMV20423	9	13	1.8	2.5	1.8	2.5	200	-01, -06, -07, -08, -09, -10
SMV20424	6	8	1.8	2.5	1.8	2.5	300	-01, -06, -07, -08, -09, -10
SMV20425	4.2	5.6	1.8	2.5	1.8	2.5	350	-01, -06, -07, -08, -09, -10

PART NUMBER FOLLOWING ◆◆◆	C _T @ 1 VOLT (pF)		C _T @ 2.5V (pF)		C _T @ 4V (pF)		Q @ 4 VOLTS 50 MHz	AVAILABLE IN THE PACKAGES
	MIN	TYP	MIN	MAX	TYP	MAX	MIN	
SMV20411	95	100	40	65	20	25	80	-01, -06, -07, -08, -09, -10
SMV20412	42	54	18	27	8.7	12	150	-01, -06, -07, -08, -09, -10
SMV20413	17	22	8.5	10.5	4.0	5.5	200	-01, -06, -07, -08, -09, -10
SMV20414	14.5	16	6.5	7.8	3.0	4.8	300	-01, -06, -07, -08, -09, -10
SMV20415	8.7	11.3	4.3	5.5	2.2	2.9	350	-01, -06, -07, -08, -09, -10

Reverse Breakdown Voltage (VBR)	10 µAdc	12 Volt Min
Max Reverse Leakage Current (IR)	VR = 8 Volts	20 nAdc
Device Dissipation (PD)	Ta = 25°C	250 mW
Junction Temperature (TJ)		125°C
Operating Temperature (Topr)		-55° to +125°C
Storage Temperature (Tstg)		-65° to +150°C

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Package Styles

Requires adding a dash suffix number to the part number

SOT23 Single	-08
SOT23 Common Anode	-09
SOT23 Common Cathode	-10
SOD323	-06
SOD523 (SC79, SC90)	-07
CHIPS	-01