

## Surface Mount 3022 / 3033 SERIES Varactor SUPER HYPERABRUPT TUNING DIODES FOR VCXO'S

- Extremely High Capacitance Swing
- Linear Characteristics
- Uniform Capacitance / Temperature Coefficient
- Highly Reproducible Ion Implanted Structure

*Designed for 3 and 5 volt circuits*

PART NUMBER ◆◆◆	C <sub>T</sub> @ 1.0 VOLT (pF)	C <sub>T</sub> @ 2.5 VOLT (pF)		C <sub>T</sub> @ 4 VOLT (pF)	R <sub>s</sub> @ 4 VOLTS 50 MHz MAX	AVAILABLE IN THE FOLLOWING PACKAGES
	MIN	MIN	MAX	MAX		
SMV30222	18	5	7	2.4	4.0 Ω	-01, -06, -07, -08, -09, -10
SMV30223	36	10	14	4.8	2.3 Ω	-01, -06, -07, -08, -09, -10
SMV30224	54	15	21	7.2	1.9 Ω	-01, -06, -07, -08, -09
SMV30225	72	20	28	9.6	1.5 Ω	-01, -06, -07, -08, -09

*Designed specifically for 3 volt circuits*

PART NUMBER ◆◆◆	C <sub>T</sub> @ 0.3 V / C <sub>T</sub> @ 1.65 V RATIO		C <sub>T</sub> @ 1.65 VOLT (pF)		C <sub>T</sub> @ 1.65 V / C <sub>T</sub> @ 3.0 V RATIO		R <sub>s</sub> @ 1.65 VOLTS 50 MHz MAX	AVAILABLE IN THE FOLLOWING PACKAGES
	MIN	TYP	MIN	MAX	MIN	TYP		
SMV30332	3.0	4.0	5.5	7.0	3.0	4.0	16.0 Ω	-01, -06, -07, -08, -09, -10
SMV30333	3.0	4.0	11.0	14.0	3.0	4.0	9.0 Ω	-01, -06, -07, -08, -09, -10

Reverse Breakdown Voltage (VBR)	10 μA <sub>dc</sub>	8 Volt Min
Max Reverse Leakage Current (IR)	VR = 6 Volts	0.1 μA <sub>dc</sub>
Device Dissipation (PD)	T <sub>a</sub> = 25°C	250 mW
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