

Silicon Hyperabrupt Tuning Varactors: Wideband



Plastic SMT

- Available in Tape and Reel
- Small and High Volume Commercial Applications
- Wide Selection of Capacitance Ranges

The Aeroflex / Metelics Hyperabrupt Varactors come in a wide variety of capacitance values and high capacitance ratios. These devices are available in single junction, common anode and common cathode configurations.

Single and Common Cathode Super Hyperabrupt Varactors For VCXOs

DESIGNED FOR 3 AND 5 VOLT CIRCUITS

Model	C_T pF	C_T pF		C_T pF	RS
	MIN	MIN	MAX	MAX	MAX
SMV30222	18	5	7	2.4	4.0 Ω
SMV30223	36	10	14	4.8	2.3 Ω
SMV30224	54	15	21	7.2	1.9 Ω
SMV30225	72	20	28	9.6	1.5 Ω
Test Conditions	@ -1 Vdc, F = 1 MHz	@ 2.5 Vdc, F = 1 MHz		@ -4 Vdc, F = 1 MHz	@ 50 Vdc, F = 50 MHz

DESIGNED FOR 3 VOLT CIRCUITS

Model	C_T RATIO		C_T pF		C_T RATIO		RS
	MIN	TYP	MIN	MAX	MIN	TYP	MAX
SMV30332	3.0	4.0	5.5	7.0	3.0	4.0	16.0 Ω
SMV30333	3.0	4.0	11.0	14.0	3.0	4.0	9.0 Ω
Test Conditions	C_T @ 0.3 V / C_T @ 1.65 V		C_T @ 1.65 V		C_T @ 1.65 V / C_T @ 3.0 V		@ 1.65 V 50 MHz

Maximum Ratings	Parameters	Value	Rating
	Reverse Breakdown Voltage	10 μ Adc	8 Volt MIN
	Max Reverse Leakage Current	$V_R = 6$ Volts	0.1 μ Adc
	Device Dissipation	$T_a = 25^\circ$ C	250 mW
	Operating Temperature		-55° to 125° C
	Storage Temperature		-65° to 150° C