KNOX Semiconductor ESTABLISHED 1974 INC.

SILICON HYPERABRUPT TUNING DIODES

- High capacitance ratios
- Linear tuning between 2 and 8 volts
- Available over a broad range junction capacitances
- Satisfies a large number of broadband applications thru the VHF frequency band

SMV1401 - SMV1412

PART NUMBER ♦♦♦	DIODE CAPACITANCE (CT) pF @ 1V•1MHz MIN	MAX	pF @ 2V•1 MHz MIN	MAX	TUNING RATIO (TR) C•1V / C•10V @ 1 MHz MIN	C•2V / C•10V @ 1 MHz MIN	QUALITY FACTOR Q @ 2V • 1 MHz MIN	AVAILABLE IN THE FOLLOWING PACKAGES
SMV1401	440	660			14:1		200	-01, -14, -15
SMV1402			45	69		10:1	200	-01, -08, -09, -15
SMV1403			140	210		10:1	200	-01, -09, -15
SMV1404			96	144		10:1	200	-01, -08, -09, -15
SMV1405			200	300		10:1	200	-01, -09, -15
SMV1406			80	120		10:1	200	-01, -08, -09, -15
SMV1407			54	82		10:1	200	-01, -08, -09, -15
SMV1408			37	57		10:1	200	-01, -06, -08, -09, -10, -15
SMV1409			26	40		10:1	200	-01, -08, -06
SMV1410			17	27		9.5:1	200	-01, -06, -07, -08, -09, -10, -15
SMV1411			12	18		8.5:1	200	-01, -06, -07, -08, -09, -10, -15
SMV1412			8	12		7.5:1	200	-01, -06, -07, -08, -09, -10, -15

Device Dissipation (P_D)	Ta = 25°C	250 mW
Junction Temperature (T_J)		125°C
Reverse Breakdown Voltage (V_{BR})	10 µAdc	12 Vdc Min
Max Reverse Leakage Current (I_R)	Vr = 10 Vdc	0.1 µAdc
Operating Temperature (Topr)		-55° to + 125°C
Storage Temperature (Tstg)		-65° to + 150°C
Capacitance Tolerance		Standard Device ± 20%

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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
SOT223	-14
SOD323	-06
SOD523 (SC79, SC90)	-07
TO92 2 Terminal (TMV)	-15
CHIPS	-01

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