

VARACTOR TUNING DIODES

JEDEC Part Number	Product Highlights	Capacitance at $V_R=4.0$ V and $f=1.0$ MHz	Figure of Merit at 4.0 V and 50 MHz	Capacitance Ratio 2.0 V to $V_{R,W}$ V		Maximum Working Voltage	Minimum Reverse Breakdown at $I_R=10$ μ A	Maximum Ratings						
		(pF)	Minimum	Min	Max	$V_{R,W}$ (Volts)	$V_{R,B}$ (Volts)							
1N5681 1N5682 1N5683 1N5684 1N5685	Very High Q	6.8 7.0 10.0 12.0 15.0	600 600 550 550 550	3.1 3.1 3.2 3.2 3.2	3.3 3.3 3.4 3.4 3.4	30	30	Package Style DO-7 DC Power Dissipation @ $T_A=25^\circ\text{C}$ 400 mW Reverse Current @ $T_A=25^\circ\text{C}$ and $V_R = 25.0$ volts 20 nA Reverse Current @ $T_A=150^\circ\text{C}$ and $V_R = 25.0$ volts 20 μ A Operating Temp. Range $-65^\circ\text{C}/+150^\circ\text{C}$ Storage Temp. Range $-65^\circ\text{C}/+150^\circ\text{C}$ Capacitance Tolerance Standard Device $\pm 20\%$ Suffix A $\pm 10\%$ Suffix B $\pm 5\%$ Suffix C $\pm 2\%$						
1N5686 1N5687 1N5688 1N5689 1N5690		Intermediate Voltage	18.0 22.0 27.0 33.0 39.0	500 500 500 500 450	3.2 3.3 3.3 3.3 3.3				3.4 3.5 3.5 3.5 3.5					
1N5691 1N5692 1N5693 1N5694 1N5695	Low Leakage	47.0 56.0 68.0 82.0 100.0	400 300 250 225 200	3.3 3.3 3.3 3.3 3.3	3.5 3.5 3.5 3.5 3.5									
1N5458 1N5459 1N5460 1N5461 1N5462	Very High Q	3.9 4.7 5.6 7.0 8.2	600 600 600 600 600	2.5 2.6 2.6 2.7 2.8	3.1 3.1 3.1 3.1 3.1				40	45	Package Style DO-7 DC Power Dissipation @ $T_A=25^\circ\text{C}$ 400 mW Reverse Current @ $T_A=25^\circ\text{C}$ and $V_R = V_{R,W}$ volts 20 nA Reverse Current @ $T_A=150^\circ\text{C}$ and $V_R = V_{R,W}$ volts 20 μ A Operating Temp. Range $-65^\circ\text{C}/+175^\circ\text{C}$ Storage Temp. Range $-65^\circ\text{C}/+200^\circ\text{C}$ Capacitance Tolerance Standard Device $\pm 20\%$ Suffix A $\pm 10\%$ Suffix B $\pm 5\%$			
1N5463 1N5464 1N5465 1N5466 1N5467		Low Voltage	10.0 12.0 15.0 18.0 20.0	550 550 550 500 500	2.8 2.8 2.8 2.9 2.9							3.1 3.1 3.1 3.1 3.1		
1N5468 1N5469 1N5470 1N5471 1N5472	Low Leakage	22.0 27.0 33.0 39.0 47.0	500 500 500 450 400	2.9 2.9 2.9 2.9 2.9	3.1 3.1 3.2 3.2 3.2									
1N5473 1N5474 1N5475 1N5476		56.0 68.0 82.0 100.0	300 250 225 200	2.9 2.9 2.9 2.9	3.2 3.2 3.2 3.2									
1N5139 1N5140 1N5141 1N5142 1N5143	High Q	6.8 10.0 12.0 15.0 18.0	350 300 300 250 250	2.7 2.8 2.8 2.8 2.8								60	65	Package Style DO-7 DC Power Dissipation @ $T_A=25^\circ\text{C}$ 400 mW Reverse Current @ $T_A=25^\circ\text{C}$ and $V_R = 55$ volts 20 nA Reverse Current @ $T_A=150^\circ\text{C}$ and $V_R = 55$ volts 20 μ A Temp. Coefficient of Capacitance at $V_R=4.0$ Vdc and $T_A=-40/+85^\circ\text{C}$ 0.03 %/ $^\circ\text{C}$ Operating Temp. Range $-65^\circ\text{C}/+175^\circ\text{C}$ Storage Temp. Range $-65^\circ\text{C}/+200^\circ\text{C}$ Capacitance Tolerance Standard Device $\pm 10\%$ Suffix A $\pm 5\%$ Suffix B $\pm 2\%$ Suffix C $\pm 1\%$
1N5144 1N5145 1N5146 1N5147 1N5148	Low Leakage	22.0 27.0 33.0 39.0 47.0	200 200 200 200 200	3.2 3.2 3.2 3.2 3.2										
1N5696B 1N5697B 1N5698B 1N5699B 1N5700B	High Q	6.8 8.2 10.0 12.0 15.0	450 450 400 400 400	2.7 2.7 2.8 2.8 2.8	2.9 2.9 3.0 3.0 3.0							60	65	Package Style DO-7 DC Power Dissipation @ $T_A=25^\circ\text{C}$ 400 mW Reverse Current @ $T_A=25^\circ\text{C}$ and $V_R = 25.0$ volts 20 nA Reverse Current @ $T_A=150^\circ\text{C}$ and $V_R = 25.0$ volts 20 μ A Operating Temp. Range $-65^\circ\text{C}/+150^\circ\text{C}$ Storage Temp. Range $-65^\circ\text{C}/+150^\circ\text{C}$ Capacitance Tolerance Standard B Suffix $\pm 5\%$ No Suffix $\pm 20\%$ Suffix A $\pm 10\%$ Suffix C $\pm 2\%$
1N5701B 1N5702B 1N5703B 1N5704B 1N5705B		High Voltage	18.0 22.0 27.0 33.0 39.0	375 375 350 350 325	2.9 3.2 3.2 3.2 3.2	3.0 3.4 3.4 3.4 3.4								
1N5706B 1N5707B 1N5708B 1N5709B 1N5710B		47.0 56.0 68.0 82.0 100.0	300 225 175 150 150	3.2 3.2 3.2 3.2 3.2	3.4 3.4 3.4 3.4 3.4									