

Varactor Diodes 1N4786 to 1N4815

TYPE	CAPACITANCE @-4Vdc 1 MHz pF	CAPACITANCE RATIO 0.1V to 4V		CAPACITANCE RATIO MWV to 4V		MAXIMUM WORKING VOLTAGE Vdc	MINIMUM BREAKDOWN VOLTAGE I _R =100uA Vdc
		MIN	MAX	MIN	MAX		
1N4786	6.8	2.40	2.56	0.462	0.482	25	28
1N4787	8.2	2.42	2.58	0.455	0.473	25	28
1N4788	10.0	2.34	2.50	0.443	0.461	25	28
1N4789	12.0	2.35	2.49	0.441	0.457	25	28
1N4790	15.0	2.37	2.49	0.438	0.448	25	28
1N4791	18.0	2.36	2.48	0.487	0.497	20	22
1N4792	22.0	2.35	2.46	0.487	0.497	20	22
1N4793	27.0	2.35	2.46	0.486	0.496	20	22
1N4794	33.0	2.35	2.46	0.485	0.495	20	22
1N4795	39.0	2.34	2.44	0.483	0.494	20	22
1N4796	47.0	2.33	2.43	0.483	0.492	20	22
1N4797	56.0	2.32	2.42	0.551	0.561	15	17
1N4798	68.0	2.30	2.40	0.551	0.561	15	17
1N4799	82.0	2.26	2.36	0.549	0.558	15	17
1N4800	100.0	2.24	2.33	0.547	0.553	15	17
1N4801	6.8	2.40	2.56	0.260	0.285	100	110
1N4802	8.2	2.42	2.58	0.263	0.283	100	110
1N4803	10.0	2.34	2.50	0.242	0.262	100	110
1N4804	12.0	2.35	2.49	0.242	0.259	100	110
1N4805	15.0	2.37	2.49	0.242	0.256	100	110
1N4806	18.0	2.36	2.48	0.242	0.254	90	99
1N4807	22.0	2.35	2.46	0.241	0.252	90	99
1N4808	27.0	2.35	2.46	0.276	0.285	65	72
1N4809	33.0	2.35	2.46	0.287	0.295	60	66
1N4810	39.0	2.34	2.44	0.300	0.306	55	61
1N4811	47.0	2.33	2.43	0.313	0.320	50	55
1N4812	56.0	2.32	2.42	0.348	0.354	40	44
1N4813	68.0	2.30	2.40	0.398	0.404	30	33
1N4814	82.0	2.26	2.36	0.477	0.483	20	22
1N4815	100.0	2.24	2.33	0.478	0.484	20	22

Package Style.....DO-7 or DO-14
 Forward Voltage Drop @100mA.....1.0Vdc max
 D.C. Power Dissipation @ 25°C.....500mW max
 Operating Temperature.....-65°C to +150°C
 Storage Temperature.....-65°C to +150°C
 Quality Factor (Q)
 V_R=4Vdc; f=1MHz.....750 min
 V_R=4Vdc; f=50MHz.....15 min
 Reverse Current @ MWV.....5nA max
 Reverse Current @ MWV (150°C).....5uA max
 Capacitance Tolerance:
 Standard Device.....±20%
 Suffix A.....±10%
 Suffix B.....±5%
 Suffix C.....±2%
 Suffix D.....±1%

Varactor Diodes Tuning

ELECTRICAL CHARACTERISTICS @ Ta=25°C

DEVICE TYPE	CAPACITANCE @ 4Vdc			CAPACITANCE RATIO C4/C60	FIGURE OF MERIT Q
	MIN.	TYP.	MAX.		
1N5139	6.12	6.8	7.48	2.7	350
1N5139A	6.46	6.8	7.14	2.7	350
1N5140	9.0	10.0	11.0	2.8	300
1N5140A	9.5	10.0	10.5	2.8	300
1N5141	10.8	12.0	13.2	2.8	300
1N5141A	11.4	12.0	12.6	2.8	300
1N5142	13.5	15.0	16.5	2.8	250
1N5142A	14.3	15.0	15.7	2.8	250
1N5143	16.2	18.0	19.8	2.8	250
1N5143A	17.1	18.0	18.9	2.8	250
1N5144	19.8	22.0	24.2	3.2	200
1N5144A	20.9	22.0	23.1	3.2	200
1N5145	24.3	27.0	29.7	3.2	200
1N5145A	25.7	27.0	28.3	3.2	200
1N5146	29.7	33.0	36.3	3.2	200
1N5146A	31.4	33.0	34.6	3.2	200
1N5147	36.1	39.0	42.9	3.2	200
1N5147A	37.1	39.0	40.9	3.2	200
1N5148	42.3	47.0	51.7	3.2	200
1N5148A	44.7	47.00	49.3	3.2	200

Current Regulator Field Effect Diodes

TYPE	NOMINAL REGULATOR CURRENT Ip (mA) @ VT=25V			MINIMUM DYNAMIC IMPEDANCE ZT @ VT=25V M ohm	MINIMUM KNEE IMPEDANCE ZK @ VK=6V M ohm	MAXIMUM LIMITING VOLTAGE VL @ IL=0.8Ip volts
	NOM	MIN	MAX			
1N5283	0.22	0.198	0.242	25.00	2.750	1.00
1N5284	0.22	0.216	0.264	19.00	2.350	1.00
1N5285	0.27	0.243	0.297	14.00	1.950	1.00
1N5286	0.30	0.270	0.330	9.00	1.600	1.00
1N5287	0.33	0.297	0.363	6.60	1.350	1.00
1N5288	0.39	0.351	0.429	4.10	1.000	1.05
1N5289	0.43	0.387	0.473	3.30	0.870	1.05
1N5290	0.47	0.423	0.517	2.70	0.750	1.05
1N5291	0.56	0.504	0.616	1.90	0.560	1.10
1N5292	0.62	0.558	0.682	1.55	0.470	1.13
1N5293	0.68	0.612	0.748	1.35	0.400	1.15
1N5294	0.75	0.675	0.825	1.15	0.335	1.20
1N5295	0.82	0.738	0.902	1.00	0.290	1.25
1N5296	0.91	0.819	1.001	0.88	0.240	1.29
1N5297	1.00	0.900	1.100	0.80	0.205	1.35
1N5298	1.10	0.990	1.210	0.70	0.180	1.40
1N5299	1.20	1.080	1.320	0.64	0.155	1.45
1N5300	1.30	1.170	1.430	0.58	0.135	1.50
1N5301	1.40	1.260	1.540	0.54	0.115	1.55
1N5302	1.50	1.350	1.650	0.51	0.105	1.60
1N5303	1.60	1.440	1.760	0.475	0.092	1.65
1N5304	1.80	1.620	1.980	0.420	0.074	1.75
1N5305	2.00	1.800	2.200	0.395	0.061	1.85
1N5306	2.20	1.980	2.420	0.370	0.052	1.95
1N5307	2.40	2.160	2.640	0.345	0.044	2.00
1N5308	2.70	2.430	2.970	0.320	0.035	2.15
1N5309	3.00	2.700	3.300	0.300	0.029	2.25
1N5310	3.30	2.970	3.630	0.280	0.024	2.35
1N5311	3.60	3.240	3.960	0.265	0.020	2.50
1N5312	3.90	3.510	4.290	0.255	0.017	2.60
1N5313	4.30	3.870	4.730	0.245	0.014	2.75
1N5314	4.70	4.230	5.170	0.235	0.012	2.90

Package Style.....DO-7
 D.C. Power Dissipation @75°C.....600mW max
 Peak Operating Voltage.....100 volts
 Operating Temperature Range.....-55°C to +200°C
 Storage Temperature Range.....-55°C to +200°C

Varactor Diodes 1N5439 to 1N5476

TYPE	CAPACITANCE @-4Vdc 1MHz pF	MINIMUM QUALITY FACTOR Q-4Vdc f=50MHz	TUNING RATIO 2V to 30V	
			MIN	MAX
1N5439	3.3	450	2.3	3.1
1N5440	4.7	450	2.4	3.1
1N5441	6.8	450	2.5	3.1
1N5442	8.2	450	2.5	3.1
1N5443	10.0	400	2.6	3.1
1N5444	12.0	400	2.6	3.1
1N5445	15.0	400	2.6	3.1
1N5446	18.0	350	2.6	3.1
1N5447	20.0	350	2.6	3.1
1N5448	22.0	350	2.6	3.2
1N5449	27.0	350	2.6	3.2
1N5450	33.0	350	2.6	3.2
1N5451	39.0	300	2.6	3.2
1N5452	47.0	250	2.6	3.2
1N5453	56.0	200	2.6	3.3
1N5454	68.0	175	2.7	3.3
1N5455	82.0	175	2.7	3.3
1N5456	100.0	175	2.7	3.3
1N5461	6.8	600	2.7	3.1
1N5462	8.2	600	2.8	3.1
1N5463	10.0	550	2.8	3.1
1N5464	12.0	550	2.8	3.1
1N5465	15.0	550	2.8	3.1
1N5466	18.0	500	2.9	3.1
1N5467	20.0	500	2.9	3.1
1N5468	22.0	500	2.9	3.2
1N5469	27.0	500	2.9	3.2
1N5470	33.0	500	2.9	3.2
1N5471	39.0	450	2.9	3.2
1N5472	47.0	400	2.9	3.2
1N6573	56.0	300	2.9	3.3
1N5474	68.0	250	2.9	3.3
1N5475	82.0	225	2.9	3.3
1N5476	100.0	200	2.9	3.3

Package Style.....D0-7
 Reverse Breakdown Voltage
 @ $I_R=10\mu A$30V min
 D.C Power Dissipation @ 25 C.....400mW max
 Operating Temperature.....-65 C to +150 C
 Storage Temperature.....-65 C to +150 C
 Reverse Current @25Vdc.....0.02uA max
 Reverse Current @25Vdc (150 C).....20uA max
 Capacitance Tolerance:
 Standard Device.....+20%
 Suffix A.....+10%
 Suffix B.....+5%
 Suffix C.....+2%
 Suffix D.....+1%

Varactor Diodes 1N5681 to 1N5710

TYPE	CAPACITANCE @-4Vdc 1MHz pF	CAPACITANCE RATIO				MINIMUM QUALITY FACTOR Q-4Vdc f=50MHz	MAXIMUM WORKING VOLTAGE Vdc	MINIMUM REVERSE BREAKDOWN VOLTAGE I _R =10uA Vdc
		2V - 40V		4V -60V				
		MIN	TYP	MIN	TYP			
1N5681	6.8	3.1	3.3			600	40	45
1N5682	8.2	3.1	3.3			600	40	45
1N5683	10.0	3.2	3.4			550	40	45
1N5684	12.0	3.2	3.4			550	40	45
1N5685	15.0	3.2	3.4			550	40	45
1N5686	18.0	3.2	3.4			500	40	45
1N5687	22.0	3.3	3.5			500	40	45
1N5688	27.0	3.3	3.5			500	40	45
1N5689	33.0	3.3	3.5			500	40	45
1N5690	39.0	3.3	3.5			450	40	45
1N5691	47.0	3.3	3.5			400	40	45
1N5692	56.0	3.3	3.5			300	40	45
1N5693	68.0	3.3	3.5			250	40	45
1N5694	82.0	3.3	3.5			225	40	45
1N5695	100.0	3.3	3.5			200	40	45
1N5696	6.8			2.7	2.9	450	60	65
1N5697	8.2			2.7	2.9	450	60	65
1N5698	10.0			2.8	3.0	400	60	65
1N5699	12.0			2.8	3.0	400	60	65
1N5700	15.0			2.8	3.0	400	60	65
1N5701	18.0			2.8	3.0	375	60	65
1N5702	22.0			3.2	3.4	375	60	65
1N5703	27.0			3.2	3.4	350	60	65
1N5704	33.0			3.2	3.4	350	60	65
1N5705	39.0			3.2	3.4	325	60	65
1N5706	47.0			3.2	3.4	300	60	65
1N5707	56.0			3.2	3.4	225	60	65
1N5708	68.0			3.2	3.4	175	60	65
1N5709	82.0			3.2	3.4	150	60	65
1N5710	100.0			3.2	3.4	150	60	65

Package Style.....D0-7
 D.C. Power Dissipation @25°C.....400mW max
 Operating Temperature.....-65°C to +150°C
 Storage Temperature.....-65°C to +150°C
 Reverse Current @ MWV.....20nA max
 Reverse Current @ MWV (150°C).....20uA max
 Capacitance Tolerance:
 Standard Device.....±20%
 Suffix A.....±10%
 Suffix B.....±5%