

Varactor Diodes

V830 to V840

Type Number	Ct Diode Capacitance Vr = 4 Vdc, f = 1 MHz (pF)			Q, Figure of Merit Vr = 4 Vdc f = 50 MHz		TR, Tuning Ratio f = 1 MHz C4/C25	
	Min	Nom	Max	Min	Typ	Min	Typ
V830	13.5	15.0	16.5	30	35	1.8	2.00
V831	16.2	18.0	19.8	25	30	1.8	2.00
V832	19.8	22.0	24.2	25	30	1.8	2.10
V833	24.3	27.0	29.7	25	30	1.8	2.10
V834	29.7	33.0	36.3	20	25	1.9	2.12
V835	35.1	39.0	42.9	20	25	1.9	2.12
V836	42.3	47.0	51.7	15	20	1.9	2.15
V837	50.4	56.0	61.6	15	20	1.9	2.15
V838	61.2	68.0	74.8	15	20	2.0	2.18
V839	73.8	82.0	90.2	10	15	2.0	2.18
V840	90.0	100.0	110.0	10	15	2.0	2.18

ULTRA-LOW LEAKAGE, V907 to V900E

Type Number	Capacitance @ -4 Vdc 1 MHz (pF)	Typ Capacitance Ratio 0.5 V to MWV	Max Working Voltage (Vdc)	Min Breakdown Voltage Ir = 100 μA (Vdc)
V907	7	4.1	25	28
V910	10	4.1	25	28
V912	12	4.2	25	28
V915	15	4.2	25	28
V920	20	3.9	20	22
V927	27	4.0	20	22
V933	33	4.1	20	22
V939	39	4.1	20	22
V947	47	3.9	20	22
V956	56	3.5	15	17
V968	68	3.5	15	17
V982	82	3.5	15	17
V900	100	3.5	15	17
V907E	7	6.9	100	110
V910E	10	6.9	100	110
V912E	12	7.5	100	110
V915E	15	7.5	100	110
V920E	20	7.9	90	99
V927E	27	7.4	65	72
V933E	33	6.5	60	66
V939E	39	6.3	55	61
V947E	47	6.1	50	55
V956E	56	5.7	40	44
V968E	68	4.6	30	33
V982E	82	4.0	20	22
V900E	100	4.0	20	22

MAXIMUM RATINGS

	V830 - V840	V907 - V900E
Package Style	DO-7	DO-7 or DO-14
Forward Voltage Drop @ 100 mA		1.0 Vdc
DC Power Dissipation @ Ta = 25 °C	400 mW	400 mW
Reverse Breakdown Voltage @ I = 10 μA	30 Vdc	
Reverse Current @ MWV		5 nA
Reverse Current @ 25 V	0.2 μA	
Operating Temperature Range		- 65 to + 150 °C
Junction Temperature	175 °C	
Storage Temperature Range	- 65 to + 200 °C	- 65 to + 150 °C
Capacitance Tolerance: Standard Device		± 20 %
Suffix A		± 10 %
Suffix B		± 5 %
Suffix C		± 2 %
Suffix D		± 1 %