



LOW COST
HIGH Q
 SILICON VARACTRON[™]
VOLTAGE-VARIABLE CAPACITANCE DIODES

**CV5007
 THRU
 CV5100**

GEOMETRY 415

Replaces MV 2101 thru MV 2115

- Q@-4V DC, 50 MHz to 450
- HERMETIC DO-7 PACKAGE
- SPECIFIED TUNING RATIO LIMITS

ABSOLUTE MAXIMUM RATINGS: (ALL TYPES)

PARAMETER	SYMBOL	MAXIMUM	UNIT
Reverse Voltage	V _R	30	Volts
Forward Current	I _F	250	mA
Device Dissipation @ T _A = 25°C	P _D	400	mW
Operating Temperature Range	T _{opr}	-65 to +175	°C
Storage Temperature Range	T _{stg}	-65 to +200	°C

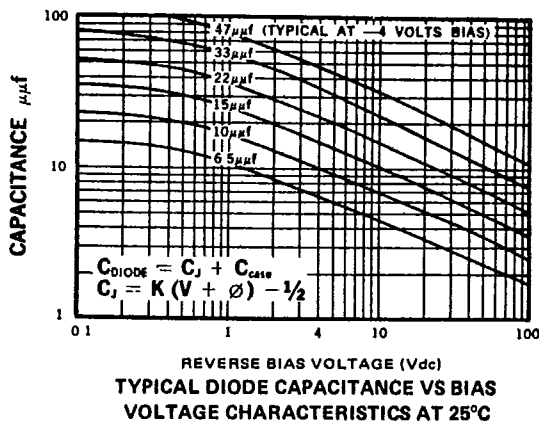
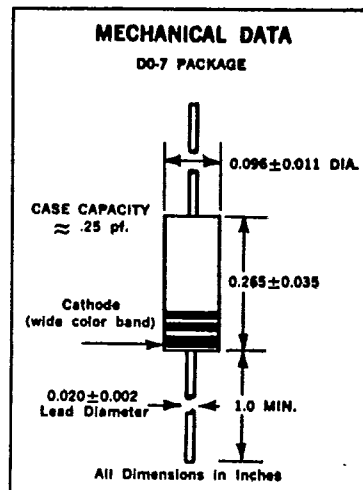
ELECTRICAL DATA: (T_A = 25°C) ALL TYPES (UNLESS OTHERWISE NOTED)

PARAMETER	SYMBOL	Min.	Max.	Unit
Reverse Voltage Breakdown @ I _R = 10μA _{dc}	BVR	30		Volts
Reverse Leakage Current @ V _R = 25 V _{dc}	I _R		0.10	μA
Temp. Coefficient of Capacitance V _R = 4 V _{dc} , f = 1 MHz (-65 to +85°C)	TCC		400	ppm/°C

ELECTRICAL CHARACTERISTICS: T_A = 25°C (UNLESS OTHERWISE NOTED)

Device Type	C ₁ - Nominal Diode Capacitance V _R = 4VDC, f = 1 MHz	Minimum Q (Figure of Merit) V _R = 4VDC f = 80 MHz	Tuning Ratio C ₂ /C ₃₀ , 1 MHz	
			Min.	Max.
CV5007	6.8	450	2.5	3.1
CV5008	8.2	450	2.5	3.1
CV5010	10.0	400	2.5	3.1
CV5012	12.0	400	2.5	3.1
CV5015	15.0	400	2.5	3.1
CV5018	18.0	350	2.5	3.1
CV5020	20.0	350	2.5	3.1
CV5022	22.0	350	2.5	3.2
CV5027	27.0	300	2.5	3.2
CV5033	33.0	200	2.5	3.2
CV5039	39.0	150	2.5	3.2
CV5047	47.0	150	2.5	3.2
CV5066	56.0	150	2.6	3.3
CV5068	68.0	150	2.6	3.3
CV5082	82.0	100	2.6	3.3
CV5100	100.0	100	2.6	3.3

Standard Capacitance Tolerance = ± 10%
 Other Tolerances available upon request.



www.DataSheet4U.com