CRYSTALONCS
2805 Veterans Highway
Suite 14
Ronkonkoma, N.Y. 11779

HIGH-Q-HIGH VOLTAGE-HIGH CAPACITANCE SILICON EPITAXIAL VARACTRON VOLTAGE-VARIABLE CAPACITANCE DIODES

1N5714 1N5715 1N5716 1N5717 1N5718

Electrically Equivalent to 1N5421-1N5425

GEOMETRY 417 or 419, GEOMETRY 419 or 423, GEOMETRY 423 or 418
1N5714, 1N5715 1N5716, 1N5717 1N5718

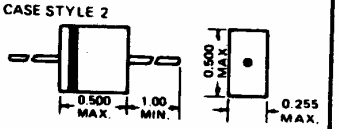
- **EPITAXIAL CONSTRUCTION**
- **CAPACITANCE TO 1000 pF**
- **Q @ 25 MHZ TO 200**
- **V_{RM} (Working Voltage) TO 200 VOLTS**

MECHANICAL DATA

EPOXY CASE – PLATED COPPER LEADS .030±.002" DIA.
CATHODE INDICATED BY COLOR BAND

CASE STYLE 1

CASE STYLE 2



All Dimensions in Inches

ABSOLUTE MAXIMUM RATINGS (ALL TYPES)

PARAMETER	SYMBOL	MAXIMUM	UNITS
Reverse Voltage	BV_R	As Indicated	Volts
Device Dissipation @ T_A = 25°C	P_D	1	Watt
Operating Temperature	T_{opr}	−65 to +150	°C
Storage Temperature	T_{stg}	−65 to +175	°C

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

PARAMETER	SYMBOL	MIN.	MAX.	UNIT
Reverse Voltage Breakdown @ I_R = 10 μADC	BV_R	As Indicated	–	Volts
Reverse Leakage Current @ Indicated V_{RM} (Wkg)	I_R	–	1.0	μA
Reverse Leakage Current @ Indicated V_{RM} (Wkg), T_A = 150°C	I_R	–	125	μA
Temp. Coefficient of Capacitance V_R=S/B 6 VDC, f=1MHZ (−65°C to +85°C)	T_{CC}	–	200	ppm/°C

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

Device Type	Nominal Capacitance (pF) V_R = 4 VDC f = 1MHZ	Nominal Capacitance (pF) V_R = 8 VDC f = 1MHZ	Minimum Tuning Ratio V_{R_1} = 4 VDC V_{R_2}=100 VDC	Minimum Tuning Ratio V_{R_1} = 4 VDC V_{R_2}=200 VDC	Minimum Working Voltage V_{RM} (Wkg) Volts	Minimum Saturation Voltage BV_R (Volts)	Minimum Q V_R = 8 VDC f = 10MHZ	Minimum Q V_R = 8 VDC f = 25MHZ	Case Style
1N5714	* 210	* 150	4.1	5.8	200	210	–	200	1
1N5715	340	250	4.1	5.8	200	210	–	200	1
1N5716	680	500	4.1	5.8	200	210	–	150	2
1N5717	680	500	4.2	–	100	115	300	–	2
1N5718	1370	1000	4.2	–	100	115	200	–	2

* **Diode Capacitance @ −4VDC is Nominal ± 20%**
Diode Capacitance @ −8VDC is Nominal ± 10%

The 1N5714 thru 1N5718 are identical to 1N5421 thru 1N5425 except for package outline and meet the electrical objectives of contract DA-36-039-AMC-06181E