



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

1N5441
THRU
1N5476

GEOMETRY 415

JAN AND JAN-TX VERSION AVAILABLE IN5461-76 B AND C

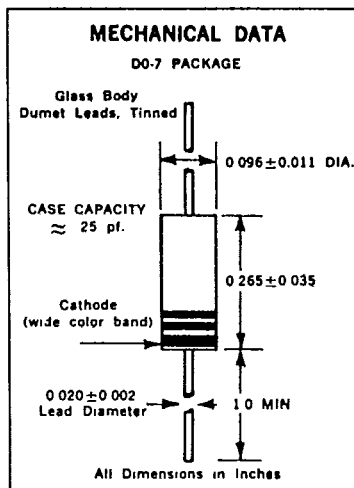
- Q @ -4V DC, 50 MHz to 600
- LOW LEAKAGE
- SPECIFIED TUNING RATIO LIMITS

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 = 10 μA _{dc}	B _{VR}	30		Volts
Reverse Leakage Current @ V _R = 25 V _{dc}	I _R		0.02	μA
Reverse Leakage Current @ V _R = 25 V _{dc} , T _A = 150° C	I _R		20	μA
Temp. Coefficient of Capacitance V _R = 4 V _{dc} , f = 1 MHz (-65 to +85° C)	T _{cc}		400	ppm/°C



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

Device Type ①	C _T - Nominal Diode Capacitance V _R = 4VDC, f = 1 MHz	Minimum Q (Figure of Merit) V _R = 4VDC f = 50 MHz	Tuning Ratio C ₂ /C ₃₀ , 1 MHz		Device Type ①	C _T - Nominal Diode Capacitance V _R = 4VDC, f = 1 MHz	Minimum Q (Figure of Merit) V _R = 4VDC, f = 50 MHz	Tuning Ratio C ₂ /C ₃₀ , 1 MHz	
			Min.	Max.				Min.	Max.
IN5441	6.8	450	2.5	3.1	IN5461	6.8	600	2.7	3.1
IN5442	8.2	450	2.5	3.1	IN5462	8.2	600	2.8	3.1
IN5443	10.0	400	2.6	3.1	IN5463	10.0	550	2.8	3.1
IN5444	12.0	400	2.6	3.1	IN5464	12.0	550	2.8	3.1
IN5445	15.0	400	2.6	3.1	IN5465	15.0	550	2.8	3.1
IN5446	18.0	350	2.6	3.1	IN5466	18.0	500	2.9	3.1
IN5447	20.0	350	2.6	3.1	IN5467	20.0	500	2.9	3.1
IN5448	22.0	350	2.6	3.2	IN5468	22.0	500	2.9	3.2
IN5449	27.0	350	2.6	3.2	IN5469	27.0	500	2.9	3.2
IN5450	33.0	350	2.6	3.2	IN5470	33.0	500	2.9	3.2
IN5451	39.0	300	2.6	3.2	IN5471	39.0	450	2.9	3.2
IN5452	47.0	250	2.6	3.2	IN5472	47.0	400	2.9	3.2
IN5453	56.0	200	2.6	3.3	IN5473	56.0	300	2.9	3.3
IN5454	68.0	175	2.7	3.3	IN5474	68.0	250	2.9	3.3
IN5455	82.0	175	2.7	3.3	IN5475	82.0	225	2.9	3.3
IN5456	100.0	175	2.7	3.3	IN5476	100.0	200	2.9	3.3

① Available in five -4V C_T (Capacitance) Ranges:
No suffix letter as shown ±20%, A±10%, B±5%, C±2% and D±1%.



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