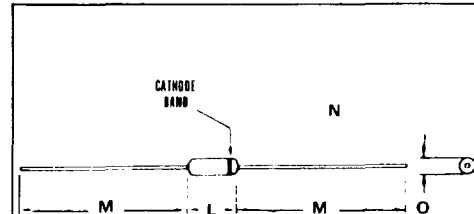


SUPER Q® UHF/VHF ABRUPT TUNING DIODES

SERIES
1N5681A-1N5695A
1N5696A-1N5710A

... with capacitance tuning ratios usable over most of their operating bias voltage range - and readily matched in groups, the diodes featured here are most suitable for many RF tuning applications including electronic delay lines, preselectors, synthesizers - all with planar passivated silicon reliability.



GENERAL SPECIFICATIONS (25° unless otherwise noted)

Rating	Symbol	Value	
Reverse Voltage	V_R	As Specified	
Junction Temperature	T_j	+175°C Max	
Storage Temperature	T_{stg}	-65°C to 200°C	
Linear Power Derating	P_D	4 mW/°C	
		DO-7	DO-14
Device Dissipation		400 mW Max	500 mW Max
Case Capacitance	C_C	0.2 pf Typ	0.3 pf Typ
Series Inductance	L_S	5 nH Typ	5 nH Typ
		1N5681A-91A 1N5695A-06A	1N5692A-95A 1N5707A-10A

Dimensions	DO-7		DO-14	
	Min	Max	Min	Max
L				
M	1.000	0.300	1.000	0.300
N	0.019	0.021	0.019	0.021
O	0.092	0.104	0.108	0.140

Dimensions in inches; to convert to millimeters, multiply by 25.4

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ$ unless otherwise noted)

REVERSE VOLTAGE	V_R	$V_R = 45$ Vdc Min @ 10uA
REVERSE CURRENT	I_R	$I_R = 20$ nA Max @ 40 Vdc
$I_R @ 150^\circ C$		$I_R = 20$ uA Max @ 40 Vdc

		$V_R = 65$ Vdc Min @ 10 uA
		$I_R = 20$ nA Mac @ 60 Vdc
		$I_R = 20$ uA Max @ 60 Vdc

Diode Cap. (CT)* ± 10% @ 4V/MHz	Type No.	Tuning Ratio C2/C40		Q @
		Min/Typ	Min	4V/50 MHz
6.8	1N5681A	3.1/3.3	600	
8.2	1N5682A	3.1/3.3	600	
10.0	1N5683A	3.2/3.4	550	
12.0	1N5684A	3.2/3.4	550	
15.0	1N5685A	3.2/3.4	550	
18.0	1N5686A	3.2/3.4	500	
22.0	1N5687A	3.3/3.5	500	
27.0	1N5688A	3.3/3.5	500	
33.0	1N5689A	3.3/3.5	500	
39.0	1N5690A	3.3/3.5	450	
47.0	1N5691A	3.3/3.5	400	
56.0	1N5692A	3.3/3.5	300	
68.0	1N5693A	3.3/3.5	250	
82.0	1N5694A	3.3/3.5	225	
100.0	1N5695A	3.3/3.5	200	

Type No.	Tuning Ratio C4/C60		Q @
	Min/Typ	Min	4V/50MHz
1N5696A	2.7/2.9	450	
1N5697A	2.7/2.9	450	
1N5698A	2.8/3.0	400	
1N5699A	2.8/3.0	400	
1N5700A	2.8/3.0	400	
1N5701A	2.8/3.0	375	
1N5702A	3.2/3.4	375	
1N5703A	3.2/3.4	350	
1N5704A	3.2/3.4	350	
1N5705A	3.2/3.4	325	
1N5706A	3.2/3.4	300	
1N5707A	3.2/3.4	225	
1N5708A	3.2/3.4	175	
1N5709A	3.2/3.4	150	
1N5710A	3.2/3.4	150	

To order with CT Nom ± 5% add Suffix "B".