

**HERMETICALLY SEALED
GLASS PACKAGED TUNING DIODES**

ABRUPT - HYPERABRUPT UH

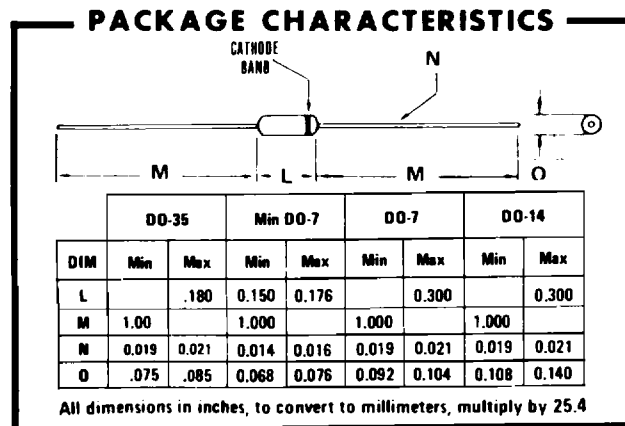
ELECTRICAL CHARACTERISTICS (T_A = 25° C unless otherwise noted)

Diode Cap. (CT)* ±10% @ 4V/1 MHz pF	GENERAL APPLICATIONS			LOW INDUCTANCE FOR USE TO 2.5 GHz			MINIATURE GLASS VERY HIGH Q			VERY HIGH Q PREDICTABLE TRACKING			GENERAL PURPOSE			
	TYPE NO.	RATIO C2/C20 min/typ	Q4 @ 50 MHz	TYPE NO.	RATIO C2/C20 min/max	Q4 @ 50 MHz min	TYPE NO.	RATIO C2/C30 min/typ	Q4 @ 50 MHz min	TYPE NO.	RATIO C2/C30 min/typ	Q4 @ 50 MHz min	TYPE NO.	RATIO C4/C25 min/typ	Q4 @ 50 MHz	pF
1.8																1.8
2.2																2.2
2.7																2.7
3.3																3.3
3.9																3.9
4.7																4.7
5.6																5.6
6.8																6.8
8.2																8.2
10.0																10.0
12.0																12.0
15.0																15.0
18.0																18.0
20.0																20.0
22.0																22.0
27.0																27.0
33.0																33.0
39.0																39.0
47.0																47.0
56.0																56.0
68.0																68.0
82.0																82.0
100.0																100.0
VR (min)	20 Vdc @ IR = 10 uAdc			25 Vdc @ IR = 10 uAdc			30 Vdc @ IR = 10 uAdc			30 Vdc @ IR = 10 uAdc			30 Vdc @ IR = 10 uAdc			
IR (max)	0.1 uAdc @ VR = 15 Vdc			0.5 uAdc @ VR = 20 Vdc			0.02 uAdc @ VR = 25 Vdc 2.0 uAdc @ TA = 150°C			0.02 uAdc @ VR = 25 Vdc 2.0 uAdc @ TA = 150°C			0.2 uAdc @ VR = 25 Vdc			
TCC1	300 ppm/°C			300 ppm/°C			300 ppm/°C			300 ppm/°C			300 ppm/°C			
Case	DO-7			DO-35			Miniature DO-7			DO-7			DO-7			

15 & 20 VOLTS				
	TYPE NO.	RATIO C2/C20 typ	Q4 @ 20 MHz min	
Diode Cap. (CT)* 4V/1 MHz ± 10% pF	120.0	MV1652	2.6	250
	150.0	MV1654	2.6	250
	180.0	MV1656	2.6	200
	200.0	MV1658	2.6	200
VR (min)	20 Vdc @ IR = 10 uAdc	MV1652/60		
	15 Vdc @ IR = 10 uAdc	MV1652/66		
	0.1 uAdc @ VR = 15 Vdc	MV1652/60		
IR (max)	0.1 uAdc @ VR = 10 Vdc	MV1652/66		
TCC	300 ppm/°C			
Case	DO-14			

GENERAL SPECIFICATIONS
(25° C unless noted)

RATING	SYMBOL	VALUE
Reverse Voltage	VR	As SPECIFIED
Junction Temperature	Tj	+175°C Max
Storage Temperature	Tstg	-65°C to 200°C
Linear Power Derating		4 mW/°C
Device Dissipation (mW Max)	PD	400 250 400 500
Case Capacitance (pf Typ)	CC	0.10 0.15 0.2 0.3
Series Inductance (nhy Typ)	LS	1.5 3.0 5.0 5.0



*Total Diode Capacitance measured at 1 MHz and VR specified.
To order devices with CT Nom ± 5.0 % or ± 2.0% add Suffix B or C respectively.
(1) Capacitance Temperature Coefficient (typ) @ 4V/1 MHz
(2) For SQ1716, C4 = 3 pf. nom.
(3) Tuning Ratio @ C2/C15 for MV1662/66.

For other types not listed here your representative or the local requirements.

CHIP DIODES
TO ORDER PASSIVATED DIODE CHIPS,
ADD "CHIP" AFTER TYPE NO.

IF/VHF TUNING DIODES

LOWEST LEAKAGE HIGH Q			HIGH Q FOR MANY UHF-VHF USES			ABRUPT GOOD Q			HYPERABRUPT HIGH Q			HIGHER VOLTAGE HIGH Q			60 VOLT GENERAL USE		
TYPE NO.	RATIO C2/C30 min/max	Q4 @ 50 MHz min	TYPE NO.	RATIO C2/C30 min/max	Q4 @ 50 MHz min	TYPE NO.	RATIO C2/C30 min/max	Q4 @ 50 MHz min	TYPE NO.	RATIO C2/C30 min/max	Q4 @ 50 MHz min	TYPE NO.	RATIO C4/C60 min/typ	Q4 @ 50 MHz min	TYPE NO.	RATIO C4/C60 min/typ	Q4 @ 50 MHz min
.05461A	2.7/3.1	600	1N5461A	2.7/3.1	600	1N5441A	2.5/3.1	450	HA1915A	3.1	1000	GC1754	5.1	1200			
.05462A	2.8/3.1	600	1N5462A	2.8/3.1	600	1N5442A	2.5/3.1	450	HA1916A	3.1	1000	GC1755	5.1	1200			
.05463A	2.8/3.1	550	1N5463A	2.8/3.1	550	1N5443A	2.6/3.1	400	HA1917A	3.1	1000	GC1756	5.1	1200			
.05464A	2.8/3.1	550	1N5464A	2.8/3.1	550	1N5444A	2.6/3.1	400	HA1918A	3.2	900	GC1757	6.1	1100			
.05465A	2.8/3.1	550	1N5465A	2.8/3.1	550	1N5445A	2.6/3.1	400	HA1919A	3.2	800	GC1758	6.1	1100			
.05466A	2.9/3.1	500	1N5466A	2.9/3.1	500	1N5446A	2.6/3.1	350	HA1920A	3.8	800	GC1759	7.1	1100			
.05467A	2.9/3.1	500	1N5467A	2.9/3.1	500	1N5447A	2.6/3.1	350	HA1922A	3.9	800	GC1760	7.1	1000			
.05468A	2.9/3.2	500	1N5468A	2.9/3.2	500	1N5448A	2.6/3.2	350	HA1924A	3.9	700	GC1761	7.1	1000	1N5130	2.7/2.9	350
.05469A	2.9/3.2	500	1N5469A	2.9/3.2	500	1N5449A	2.6/3.2	350	HA1926A	3.9	700	GC1762	7.1	1000	1N5140	2.8/3.0	300
.05470A	2.9/3.2	500	1N5470A	2.9/3.2	500	1N5450A	2.6/3.2	350	HA1928A	3.9	700	GC1763	7.1	900	1N5141	2.8/3.0	300
.05471A	2.9/3.2	450	1N5471A	2.9/3.2	450	1N5451A	2.6/3.2	300	HA1930A	4.0	600	GC1764	7.1	900	1N5142	2.8/3.0	250
.05472A	2.9/3.2	400	1N5472A	2.9/3.2	400	1N5452A	2.6/3.2	250	HA1934A	4.0	600	GC1765	7.1	900	1N5143	2.8/3.0	250
.05473A	2.9/3.3	300	1N5473A	2.9/3.3	300	1N5453A	2.6/3.3	200	HA1936A	4.0	600	GC1766	7.1	800			
.05474A	2.9/3.3	250	1N5474A	2.9/3.3	250	1N5454A	2.7/3.3	175	HA1938A	4.0	600				1N5144	3.2/3.4	200
.05475A	2.9/3.3	225	1N5475A	2.9/3.3	225	1N5455A	2.7/3.3	175	HA1940A	4.0	500				1N5145	3.2/3.4	200
.05476A	2.9/3.3	200	1N5476A	2.9/3.3	200	1N5456A	2.7/3.3	175	HA1942A	4.0	500				1N5146	3.2/3.4	200
									HA1944A	4.0	400				1N5147	3.2/3.4	200
									HA1946A	4.0	300				1N5148	3.2/3.4	200
									HA1948A	4.0	250						
									HA1950A	4.0	200						
30 Vdc @ IR	0.004 uAdc		30 Vdc @ IR = 10 uAdc			30 Vdc @ IR = 10 uAdc			30 Vdc @ IR = 10 uAdc			60 Vdc @ IR = 10 uAdc			60 Vdc @ IR = 10 uAdc		
0.004 uAdc @ VR	30 Vdc		0.02 uAdc @ VR = 25 Vdc			0.02 uAdc @ VR = 25 Vdc			0.02 uAdc @ VR = 25 Vdc			0.02 uAdc @ VR = 55 Vdc			0.02 uAdc @ VR = 55 Vdc		
			2.0 uAdc @ TA = 150°C			2.0 uAdc @ TA = 150°C			2.0 uAdc @ TA = 150°C			2.0 uAdc @ TA = 125°C			2.0 uAdc @ TA = 150°C		
			300 ppm/°C			300 ppm/°C			400 ppm/°C			200 ppm/°C			200 ppm/°C		
			DO 7			DO 7			DO 7			MIN DO 7 GC1759 62			DO 7		
												DO 7 GC1763 70					

NOTE: IN THIS COLUMN ADD SUFFIX "A" FOR 5% CAPACITY TOLERANCE

HYPERABRUPT

— HYPER C™

ELECTRICAL CHARACTERISTICS (TA = 25°C)

TYPE NO.	DIODE CAPACITANCE (pf) @ C (Volts Bias) / pf @ 1 MHz				CAPACITANCE TUNING RATIO (TR)			Q4 @ 50 MHz min	VR @ IR = 1 uA Vdc · min	IR		CASE
	C3/pf min/max	C4/pf min/max	C8/pf min/max	C20/pf min/max	C3/C20 min/max	C4/C8 min/max	C4/C20 min/max			VR = 20 Vdc uAdc max	VR = 10 Vdc uAdc max	
										0.1	0.1	
2001		18.0/22.0	7.5/10.5	3.1/3.9			5.4/6.8	160	22	0.1		DO 7 ALL
2002		18.0/22.0	7.5/10.5			1.8/2.7		160	15		0.1	
2101	10.5/12.5		4.3/5.7	2.0/2.3	5.0/5.8			300	22	0.1		
2102	10.5/12.5		4.3/5.7	2.0/2.4	4.7/5.5			200	22	0.1		
2801			10.0/13.5	4.5/5.1	5.2/6.1			200	22	0.1		
2802			10.0/13.5	4.5/5.3	4.9/5.8			150	22	0.1		

please contact us with your