

## HF HYPERABRUPT TUNING DIODES

- Extremely high capacitance ratios provide frequency tuning up to 4:1
- Linear performance is achieved between 1.5 and 4 volts
- Diode capacitance values ranging from 46 to 350 pF
- Designed for use at frequencies up to 100 MHz

### LV1401 - LV1702

PART NUMBER	C <sub>T</sub> CAPACITANCE (pF) f = 1 MHz						TR TUNING RATIO f = 1 MHz			Q		V <sub>BR</sub> (Vdc) I <sub>r</sub> = 10 μA <sub>dc</sub>	I <sub>r</sub> (nA <sub>dc</sub> ) V <sub>R</sub> = 10 Vdc	
	V <sub>R</sub> =1.25 Vdc		V <sub>R</sub> =2 Vdc		V <sub>R</sub> =7 Vdc		V <sub>R</sub> =10Vdc		V <sub>R</sub> = 2 Vdc					
	TYP	MIN	MAX	TYP	MIN	MAX	C•1.25V / C•7V	TYP	MIN	MAX	f=1 MHz MIN / TYP	f=10 MHz MIN / TYP	MIN	MAX
LV1401	81.5	46	68	6.1	4.2	5.2	13	10	17		75	140	12	50
LV1402	81.5	46	68	6.1	4.2	5.2	13	10	17	200	700	12	100	
LV1501	180	100	150	13	8.6	10.6	14	10	17.5		50	130	12	50
LV1502	180	100	150	13	8.6	10.6	14	10	17.5	200	500	12	100	
LV1601	255	140	210	18.5	12.6	15.4	14	10	17		50	120	12	50
LV1602	255	140	210	18.5	12.6	15.4	14	10	17	200	500	12	100	
LV1701	325	180	270	24	16.2	19.8	14	10	17		50	115	12	50
LV1702	325	180	270	24	16.2	19.8	14	10	17	200	500	12	100	

### LV1801 - LV1802

PART NUMBER	C <sub>T</sub> CAPACITANCE (pF) f = 1 MHz						TR TUNING RATIO f = 1 MHz			Q		V <sub>BR</sub> (Vdc) I <sub>r</sub> = 10 μA <sub>dc</sub>	I <sub>r</sub> (nA <sub>dc</sub> ) V <sub>R</sub> = 10 Vdc	
	V <sub>R</sub> =1.25 Vdc		V <sub>R</sub> =2 Vdc		V <sub>R</sub> =7 Vdc		V <sub>R</sub> =10Vdc		V <sub>R</sub> = 1.25 Vdc					
	MIN	MAX	TYP	MIN	MAX	TYP	C•1.25V / C•7V	MIN	MAX	TYP	f=1 MHz MIN / TYP	f=10 MHz MIN / TYP	MIN	MAX
LV1801	450	550	350	30.5	37.5	26.5	12	18	13		30	70	12	100
LV1802	450	550	350	30.5	37.5	26.5	12	18	13	150	300	12	200	

Package Style  
Operating Temperature (Topr)  
Storage Temperature (Tstg)  
Other package styles are available

DO-7  
-55° to + 150°C  
-65° to + 200°C