

KNOX SEMICONDUCTOR, INC.

VHF HYPERABRUPT TUNING DIODES

LV2001(A) - LV2002(A)

TYPE NUMBER	C _T CAPACITANCE (pF) f = 1 MHz						TR TUNING RATIO f = 1 MHz				Q		V _{BR} (Vdc)		I _R (nAdc)			
	V _R = 4 Vdc		V _R = 8 Vdc		V _R =20 Vdc		C•4/ C•8V		C•4V / C•20V		V _R = 4 Vdc		I _r = 10 µAdc		V _R = 10 Vdc		V _R = 20 Vdc	
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN / TYP		MIN	TYP	TYP	MAX	TYP	MAX
LV2001	18	22	7.5	10.5	3.1	3.9			5.4	6.6	160	220	22	30			15	100
LV2001A	19	21	7.8	9.2	3.1	3.9			5.4	6.6	160	220	22	30			15	100
LV2002	18	22	7.5	10.5			1.8	2.7			160	220	15	18	15	100		
LV2002A	19	21	7.8	9.2			2.0	2.7			160	220	15	18	15	100		

LV2201(A) - LV2202(A)

TYPE NUMBER	C _T CAPACITANCE (pF) f = 1 MHz						TR TUNING RATIO f = 1 MHz				Q		V _{BR} (Vdc)		I _R (nAdc)			
	V _R = 4 Vdc		V _R = 8 Vdc		V _R =20 Vdc		C•4/ C•8V		C•4V / C•20V		V _R = 4 Vdc		I _r = 10 µAdc		V _R = 10 Vdc		V _R = 20 Vdc	
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN / TYP		MIN	TYP	TYP	MAX	TYP	MAX
LV2201	45	55	18	25	7.3	9.2			5.6	6.9	125	165	22	30			20	100
LV2201A	47.5	52.5	18.4	21.6	7.3	9.2			5.6	6.9	125	165	22	30			20	100
LV2202	45	55	18	25			1.8	2.8			125	165	15	18	20	100		
LV2202A	47.5	52.5	18.4	21.6			2.2	2.8			125	165	15	18	20	100		

LV2301(A) - LV2302(A)

TYPE NUMBER	C _T CAPACITANCE (pF) f = 1 MHz						TR TUNING RATIO f = 1 MHz				Q		V _{BR} (Vdc)		I _R (nAdc)			
	V _R = 4 Vdc		V _R = 8 Vdc		V _R =20 Vdc		C•4/ C•8V		C•4V / C•20V		V _R = 4 Vdc		I _r = 10 µAdc		V _R = 10 Vdc		V _R = 20 Vdc	
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN / TYP		MIN	TYP	TYP	MAX	TYP	MAX
LV2301	100	120	39	55	15	19			5.9	7.3	80	110	22	30			30	100
LV2301A	105	115	41.4	48.6	15	19			5.9	7.3	80	110	22	30			30	100
LV2302	100	120	39	55			1.8	2.8			80	110	15	18	30	100		
LV2302A	105	115	41.4	48.6			2.15	2.8			80	110	15	18	30	100		

LV2401(A) - LV2402(A)

TYPE NUMBER	C _T CAPACITANCE (pF) f = 1 MHz						TR TUNING RATIO f = 1 MHz				Q		V _{BR} (Vdc)		I _R (nAdc)			
	V _R = 4 Vdc		V _R = 8 Vdc		V _R =20 Vdc		C•4/ C•8V		C•4V / C•20V		V _R = 4 Vdc		I _r = 10 µAdc		V _R = 10 Vdc		V _R = 20 Vdc	
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN / TYP		MIN	TYP	TYP	MAX	TYP	MAX
LV2401	140	170	55	80	22.5	28			5.8	7.1	70	90	22	30			50	500
LV2401A	147	163	59.8	70.2	22.5	28			5.8	7.1	70	90	22	30			50	500
LV2402	140	170	55	80			1.8	2.8			70	90	15	18	50	500		
LV2402A	147	163	59.8	70.2			2.1	2.7			70	90	15	18	50	500		

LV2501(A) - LV2502(A)

TYPE NUMBER	C _T CAPACITANCE (pF) f = 1 MHz						TR TUNING RATIO f = 1 MHz				Q		V _{BR} (Vdc)		I _R (nAdc)			
	V _R = 4 Vdc		V _R = 8 Vdc		V _R =20 Vdc		C•4/ C•8V		C•4V / C•20V		V _R = 4 Vdc		I _r = 10 µAdc		V _R = 10 Vdc		V _R = 20 Vdc	
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN / TYP		MIN	TYP	TYP	MAX	TYP	MAX
LV2501	180	220	70	105	29	36			5.8	7.1	60	80	22	30			70	500
LV2501A	190	210	78	92	29	36			5.8	7.1	60	80	22	30			70	500
LV2502	180	220	70	105			1.8	2.8			60	80	15	18	70	500		
LV2502A	190	210	78	92			2.0	2.7			60	80	15	18	70	500		

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

DO-7
-55° to + 150°C
-65° to +200° C