



HYPERABRUPT - ABRUPT UHF-MICROWAVE TUNING DIODES

SERIES
MV205
MV206
LP1014-1038
EP1014-1038

... designed for electronic tuning and control applications
in the UHF and lower microwave frequency ranges.

- LOW INDUCTANCE
- PLANAR CONSTRUCTION

HYPERABRUPT

GENERAL SPECIFICATIONS (25°C unless noted)

Rating	Symbol	Value
Reverse Voltage	V_R	30 Vdc Min @ 10 μ A
Reverse Voltage Leakage Current	I_R	.05 μ Adc Max @ 28Vdc .5 μ Adc Max @ 28 Vdc & $T_A = 60^\circ\text{C}$
Junction Temperature	T_J	+175°C Max.
Storage Temperature	T_{stg}	-65°C to 200°C
Device Dissipation	P_D	5.0 Max

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ$)

TYPE NO.	Diode Cap. (CT) @ 25V/1 MHz (pF)		Tuning Ratio (TR) C3/C25 @ 1 MHz		Fig. of Merit (Q) @ 9 pF & 100 MHz
	Min.	Max.	Min.	Max.	Min.
MV205	2.0	2.3	4.5	6.0	225
MV206	1.8	2.8	4.0	6.0	150

ABRUPT

GENERAL SPECIFICATIONS (25°C unless noted)

	25 VOLT TYPES	30 VOLT TYPES
Reverse Breakdown Voltage	$V_R = 25$ Vdc @ $I_R = 10$ μ A	$V_R = 30$ Vdc @ $I_R = 20$ μ A
Reverse Leakage Current	$I_R = 0.02$ μ A @ $V_R = 20$ Vdc	$I_R = 0.02$ μ A @ $V_R = 25$ Vdc
	$I_R = 10$ μ A @ $V_R = 20$ Vdc & $T_A = 125^\circ\text{C}$	$I_R = 10$ μ A @ $V_R = 25$ Vdc & $T_A = 125^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ$)

Diode Cap. (CT) ¹ @ 4V&1 MHz			TYPE NO.	Tuning Ratio (TR) CO/C25 @ 1 MHz	Fig. of Merit Q@4V & 50 MHz	TYPE NO.	Tuning Ratio (TR) C2/C30 @ 1 MHz	Fig. of Merit Q @ 4V & 50 MHz
MIN	NOM	MAX						
1.7	2.2	2.7	LP1014	4.0:1	1000	EP1014	1.9:1	1500
2.7	3.0	3.3	LP1016	4.1:1	900	EP1016	2.2:1	1400
3.2	3.6	4.1	LP1017	4.2:1	900	EP1017	2.3:1	1200
4.0	4.5	5.1	LP1018	4.3:1	900	EP1018	2.4:1	1200
5.0	5.6	6.2	LP1019	4.4:1	800	EP1019	2.5:1	1000
6.1	6.8	7.5	LP1020	4.5:1	800	EP1020	2.5:1	1000
7.4	8.2	9.0	LP1022	4.5:1	800	EP1022	2.6:1	1000
9.0	10.0	11.0	LP1024	4.5:1	700	EP1024	2.7:1	1000
10.9	12.0	13.2	LP1026	4.5:1	700	EP1026	2.8:1	900
13.3	15.0	16.5	LP1028	4.5:1	600	EP1028	2.8:1	900
16.4	18.0	19.8	LP1030	4.6:1	600	EP1030	2.9:1	800
18.0	20.0	22.0	LP1032	4.6:1	500	EP1032	2.9:1	800
19.8	22.0	24.2	LP1034	4.7:1	500	EP1034	2.9:1	800
24.3	27.0	29.7	LP1036	4.7:1	500	EP1036	2.9:1	800
29.7	33.0	36.3	LP1038	4.7:1	500	EP1038	3.0:1	700

1. Closer Capacitance Tolerance Available Upon Request

TO ORDER - REFER TO PACKAGE DESIGNATIONS ON NEXT PAGE; SELECT CASE STYLE AND ADD TO TYPE NO.