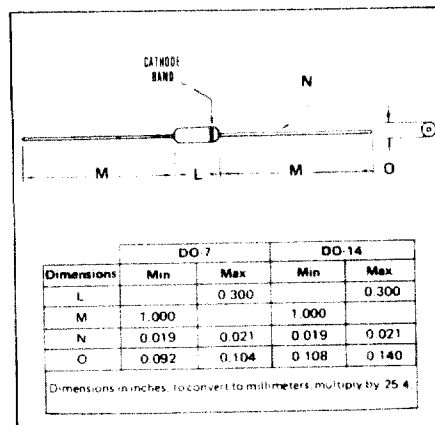


MORE HYPERABRUPT TUNING DIODES

SERIES
MV1401-MV1412

The large capacitance tuning ratio in the hyperabrupts listed here make them suitable for broad band tuning applications. Their large values of nominal capacitance are for AM applications with the lower capacitance types for use at higher frequencies. Closer tolerance values of capacitance can be specified as well as matched sets. The hyperabrupts can be ordered as chips by designating "chip" after the Type No. for hybrid applications.



MAXIMUM RATINGS

Rating	Symbol	Value	Units
Reverse Voltage	VR	12	Volts
Device Dissipation @ TA=25°C	PD	400	mW
Junction Temperature	TJ	+175	°C
Storage Temperature Range	Tstg	- 65 to +200	°C

ELECTRICAL CHARACTERISTICS (TA = 25°C unless otherwise noted.)

Characteristic — All Types	Test Conditions	Symbol	Min	Typ	Max	Unit
Reverse Breakdown Voltage	IR = 10 μ ADC	BVR	12	—	—	Vdc
Reverse Voltage Leakage Current	VR = 10Vdc, TA = 25°C	IR	—	—	0.01	μ Adc
Series Inductance	f = 250 MHz, lead length $\approx$ 1/16"	LS	—	5.0	—	nH
Case Capacitance	f = 1 MHz, lead length $\approx$ 1/16"	CC	—	0.20	—	pF

TYPE NO.	Diode Cap. (CT)** pF @ 2V/1 MHz			Tuning Ratio (TR) C2/C10 @ 1 MHz	Fig. of Merit (Q) @ 2V/1 MHz	Package
	Min	Nom	Max			
MV1401*	468	550	633	14:1	200	DO-14
MV1402	301	360	432	10:1	200	DO-14
MV1403	140	175	210	10:1	200	DO-7
MV1404	96	120	144	10:1	200	DO-7
MV1405	200	250	300	10:1	200	DO-7
MV1406	80	100	120	10:1	200	DO-7
MV1407	54	68	82	10:1	200	DO-7
MV1408	37	47	57	10:1	200	DO-7
MV1409	26	33	40	10:1	200	DO-7
MV1410	17	22	27	10:1	200	DO-7
MV1411	12	15	18	10:1	200	DO-7
MV1412	8	10	12	7.5:1	200	DO-7

*CT and TR for MV1401 measured at 1V instead of 2V as for other Type Nos.

**To order devices with CT Nom $\pm$ 10% add suffix A, $\pm$ 5% add Suffix B

MATCHING - To order sets matched to $\pm$ 3%, specify number of diodes per set and add suffix M, i.e. for 3 matched diodes, add Suffix 3M, etc.