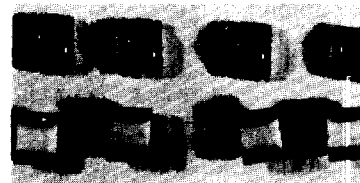
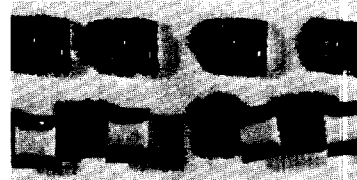


Many popular axial leaded glass packaged tuning diode types are now available in the MSI 1M Case for surface mount assemblies. The tuning diode chips, mounted on high density alumina substrates, are epoxy coated to provide reliable operating performance in equipments ranging from mobile radios to cellular telephones. The cathode is readily distinguished from the anode by the white dot on the epoxy side and by the hexagon shape of the gold plated contact on the mounting side of the 1M Case.

Tuning Diode types not listed here may be ordered in the MSI 1M Case by replacing the two character prefix of the JEDEC or other type number by 1M. For example, to order the DO-7 packaged 1N5139 tuning diode in the 1M Case, specify the 1M5139; to order the MV1404, the 1M1404 is specified and other types are ordered in a similar manner. In some assemblies, the footprint of the 1M Case gold plated wraparound contacts may fit the solder pad layouts of surface mount diodes made by other manufacturers. Tuning diodes to meet special requirements for capacitance, capacitance ratio, Q and reverse voltage ratings will be quoted upon request.



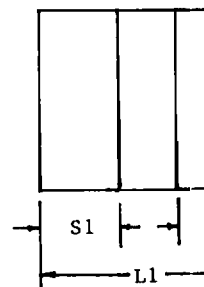
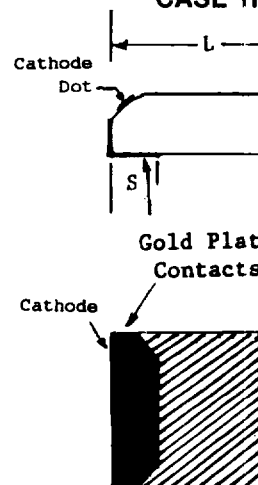
MORE HYPERABRUPT

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

Type No.	Diode Capacitance, C_T (pf)*			Capacitance Ratio			Q_2 @ 1 MHz
	min	nom	max	min	max	min	
1M1412				8	12		200
1M1411				12	18		200
1M1410				17	26		200
1M1409				27	39		200
1M1408				39	56		200
1M1407				56	80		200
1M1406				80	120		200
1M1404				96	120		200
1M1403				140	175		200
1M1405				200	250		200
1M1402				301	360		200
1M1401	468	550	633			14:1	200
VR (min)	12 Vdc @ IR=10 uAdc						
IR (max)	0.01 uAdc @ VR=10 Vdc						

*To order devices with C_T Nom. $\pm 10\%$, add suffix A; for $\pm 5\%$, add suffix B.

DIMENSIONAL CASE 1M



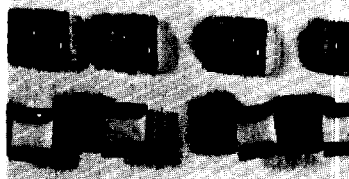
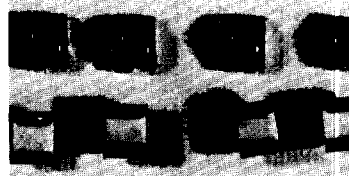
CASE 1M SOLDER PAD LAYOUT

Dim	Case 1M			
	Millimeters		Inches	
L	3.15	3.43	0.124	0.135
W	2.41	2.62	0.095	0.103
S	0.69	0.84	0.027	0.033
T	0.91	1.17	0.036	0.046

Dim.	1M Solder Pad Layout			
	Millimeters		Inches	
L1	3.47	3.63	0.136	0.143
W1	2.82	3.07	0.111	0.121
S1	1.14	1.35	0.045	0.053

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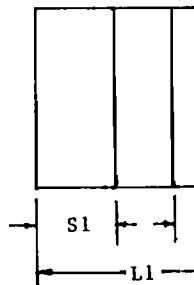
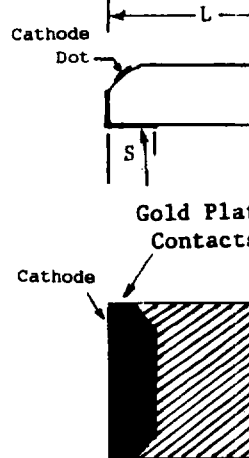
MORE HYPERABRUPT

ELECTRICAL CHARACTERISTICS (T_A = 25°)

Type No.	Diode Capacitance, CT (pf)* @ 1V/1MHz			Diode Capacitance, CT (pf)* @ 2V/1MHz			Capacitance Ratio C1/C10 C2/C10		Q2 @ 1 MHz
	min	nom	max	min	nom	max	min	min	min
1M1412					8	12		10:1	200
1M1411					12	18		10:1	200
1M1410					17	26		10:1	200
1M1409					27	39		10:1	200
1M1408					39	56		10:1	200
1M1407					56	80		10:1	200
1M1406					80	120		10:1	200
1M1404				96	120	144		10:1	200
1M1403				140	175	210		10:1	200
1M1405				200	250	300		10:1	200
1M1402				301	360	432		10:1	200
1M1401	468	550	633				14:1		200
VR (min)	12 Vdc @ IR=10 uAdc								
IR (max)	0.01 uAdc @ VR=10 Vdc								

*To order devices with CT Nom. ±10%, add suffix A; for ±5%, add suffix B.

DIMENSIONAL CASE 1



CASE 1M SOLDER PAD LAYOUT

Dim	Case 1M			
	Millimeters		Inches	
	min	max	min	max
L	3.15	3.43	0.124	0.135
W	2.41	2.62	0.095	0.103
S	0.69	0.84	0.027	0.033
T	0.91	1.17	0.036	0.046

Dim.	1M Solder Pad Layout			
	Millimeters		Inches	
	min	max	min	max
L1	3.47	3.63	0.136	0.143
W1	2.82	3.07	0.111	0.121
S1	1.14	1.35	0.045	0.053