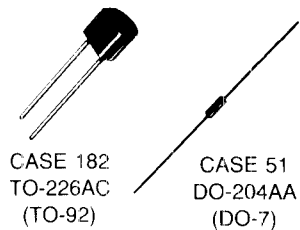


RF — SIGNAL PROCESSING DIODES (continued)

General-Purpose Tuning Diodes (continued)

High-Capacitance Tuning Diodes . . . for tuning applications in lower RF frequencies.



MAXIMUM WORKING VOLTAGE							
20 VOLTS				12 VOLTS			
CASE 182				CASE 51			
Cap Ratio 2-20 V Min	Q @ 4.0 V 20 MHz Min	Device		Cap Ratio 2-10 V Min	Q @ 2.0 V 1.0 MHz Min	Device	
C_T Nominal Capacitance pF $\pm 10\%$ (@ $V_R \approx 4.0$ V $f = 1.0$ MHz)	120	2.3	250	MV2301	10	200	MV1404, H**(2)
	150	2.3	250	MV2302	10	200	MV1403, H**(2)
	180	2.3	200	MV2303			
	200	2.3	200	MV2304			
	220	2.3	150	MV2305			
	250	2.3	150	MV2306	10	200	MV1405, H**(2)
	270	2.3	100	MV2307			
	330	2.3	100	MV2308			

(1) C_T tolerance is $\pm 20\%$.

100% Processing For High Reliability

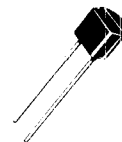
(2) $V_R \approx 2.0$ V

**100% processing on "H" devices.

Hot-Carrier Diodes

Hot-Carrier diodes are ideal for VHF and UHF mixer and detector applications as well as many higher frequency applications. They provide stable electrical characteristics by eliminating the point-contact diode presently used in many applications.

$V_{(BR)R}$ $I_R = 10 \mu A$ Volts Min	C_T $f = 1.0$ MHz pF Max	@ V_R Volts	V_F $I_F = 10$ mA Volts Max	I_R nA Max	@ V_R Volts	NF $f = 1.0$ GHz dB Max	Device	Package
4.0	10	0	0.6	250	3.0	7.0	MBD101	TO-226AC
20	1.5	15	0.6	200	15	—	MBD201	
30	1.5	15	0.6	200	25	—	MBD301	
50	1.0	20	1.2	200	25	—	MBD501	
70	1.0	20	1.2	200	35	—	MBD701	



Pin Switching Diodes

. . . designed for VHF band switching and general-purpose switching.

$V_{(BR)R}$ $I_R = 10 \mu A_{dc}$ Volts Min	R_S $I_F = 10$ mA _{dc} $f = 10$ MHz Ohms Max	C_T $f = 1.0$ MHz pF Max	L_S $f = 250$ MHz nH Typ	C_C $f = 1.0$ MHz pF Typ	Device	Package
20	0.85	2.0 (@ 15 V)	6.0	0.18	MPN3404	TO-226AC
200	1.0	1.0 (@ 20 V)	1.0	0.18	MPN3700	