

SILICON TUNING VARACTORS

This series of high tuning ratio epi-junction microwave tuning varactors (60 V) incorporates a passivated mesa technology. It is well suited for frequency tuning applications up to C band.

CHIP DIODES		CHIP AND PACKAGED DIODES		PACKAGED DIODES (1)					
TUNING RATIO $C_{j0}/C_{j60} \geq 7.8$		$V_{BR} (10 \mu A) \geq 60 V$		STANDARD CASES		OTHER CASES			
CHARACTERISTICS at 25°C		GOLD DIA $\varnothing$	JUNCTION CAPACIT. C_j	FIGURE OF MERIT Q	CASE TYPE		TUNING RATIO C_{10}/C_{160}	CASE TYPE	TUNING RATIO C_{10}/C_{160}
TEST CONDITIONS			$V_R = 4 V$ $f = 1 MHz$	$V_R = 4 V$ $f = 50 MHz$	CASE CAPACITANCE C_b			CASE CAPACITANCE C_b	
TYPE	CASE	μm	pF		Type				
		typ	$\pm 20\%^{(2)}$	min		$C_b = 0.18 pF^{(3)}$	min	$C_b = 0.12 pF^{(3)}$	min
EH 73004	C 2A	70	0.4	2100	DH 73004	F 27d	3.9	M 208	4.2
EH 73006	C 2A	100	0.6	2100	DH 73006	F 27d	4.5	M 208	4.8
EH 73008	C 2A	110	0.8	2100	DH 73008	F 27d	5.1	M 208	5.4
EH 73010	C 2A	120	1.0	2000	DH 73010	F 27d	5.5	M 208	5.8
EH 73012	C 2A	130	1.2	2000	DH 73012	F 27d	5.8	M 208	6.1
EH 73016	C 2A	150	1.6	1900	DH 73016	F 27d	6.2	M 208	6.4
EH 73020	C 2A	170	2.0	1800	DH 73020	F 27d	6.5	M 208	6.7
EH 73025	C 2A	180	2.5	1700	DH 73025	F 27d	6.7	M 208	6.9
EH 73030	C 2A	210	3.0	1600	DH 73030	F 27d	6.9	M 208	7.1
EH 73037	C 2A	230	3.7	1500	DH 73037	F 27d	7.0	M 208	7.2
EH 73045	C 2A	260	4.5	1400	DH 73045	F 27d	7.2	M 208	7.3
			$\pm 20\%^{(2)}$			$C_b = 0.18 pF^{(3)}$		$C_b = 0.15 pF^{(3)}$	
EH 73054	C 2B	280	5.4	1300	DH 73054	F 27d	7.3	BH 142	7.4
EH 73067	C 2B	310	6.7	1200	DH 73067	F 27d	7.5	BH 142	7.6
EH 73080	C 2B	350	8.0	1100	DH 73080	F 27d	7.5	BH 142	7.6
EH 73100	C 2B	380	10.0	1000	DH 73100	F 27d	7.6	BH 142	7.7
EH 73120	C 2B	420	12.0	900	DH 73120	F 27d	7.7	BH 142	7.8
EH 73150	C 2B	470	15.0	800	DH 73150	F 27d	7.8	BH 142	7.8
EH 73180	C 2C	520	18.0	700	DH 73180	F 27d	7.8	BH 142	7.8
EH 73200	C 2C	550	20.0	650	DH 73200	F 27d	7.8	BH 142	7.8
EH 73220	C 2C	580	22.0	600	DH 73220	F 27d	7.8	BH 142	7.8
EH 73270	C 2C	650	27.0	500	DH 73270	F 27d	7.8	BH 142	7.8
			$\pm 10\%^{(2)}$			$C_b = 0.18 pF^{(3)}$		$C_b = 0.4 pF^{(3)}$	
EH 73330	C 2D	710	33.0	400	DH 73330	F 27d	7.8	BH 157	7.8
EH 73390	C 2D	770	39.0	350	DH 73390	F 27d	7.8	BH 157	7.8
EH 73470	C 2D	850	47.0	300	DH 73470	F 27d	7.8	BH 157	7.8
			$\pm 10\%^{(2)}$			$C_b = 0.4 pF^{(3)}$		$C_b = 0.4 pF$	
EH 73560	C 2G	920	56.0	250	DH 73560	BH 141	7.8	BH 157	7.8
EH 73680	C 2G	1020	68.0	250	DH 73680	BH 141	7.8	BH 157	7.8
EH 73820	G2H	1120	82.0	200	DH 73820	BH 141	7.8	BH 157	7.8
EH 73999	G2H	1250	100.0	200	DH 73999	BH 141	7.8	BH 157	7.8

(1) Custom cases on request

(2) Closer tolerance on request

(3) $C_T = C_j + C_b$

Temperature range :

Operating junction (T_j) : -55°C to +150°C

Storage : -65°C to 175°C