

SOT-23 TRANSISTORS & DIODES

SILICON ABRUPT TUNER DIODES

Type	Reverse breakdown Voltage V_R Volts max.	Nominal capacitance at $V_R=2V$, $f=1MHz$ C_{tot} pF			Capacitance ratio $f=1MHz$ C_2/C_{20} min.	Q at $V_R=3V$ $f=50MHz$ min.
		min.	typ.	max.		
FMMV2101	30	6.12	6.8	7.48	2.7	450
FMMV2102	30	7.4	8.2	9.1	2.7	450
FMMV2103	30	9.0	10.0	11.0	2.7	400
FMMV2104	30	10.8	12.0	13.2	2.8	400
FMMV2105	30	13.5	15.0	16.5	2.8	400
FMMV2106	30	16.2	18.0	19.8	2.8	350
FMMV2107	30	19.8	22.0	24.2	2.8	350
FMMV2108	30	24.3	27.0	29.7	2.8	300
FMMV2109	30	29.7	33.0	36.3	2.8	200

ZENER DIODES

Type	Range (V)	Voltage tolerance %	P_{tot} mW	I_{ZRM} mA	I_{FRM} mA
BZX84	2V7 to 47V	5 or 10	350	200	200
FMMZ5232-5257	5V6 to 33V	5	350	200	200

SILICON PLANAR HIGH SPEED SWITCHING DIODES

Type	Description	Ratings		t_{rr} max. ns	Max. V_F at I_F = mA 10 50 100
		V_R Volts	I_F mA		
BAS21	Single diode	200	200	50	-/-/1.0
BAS20	Single diode	150	200	50	-/-/1.0
BAS19	Single diode	100	200	50	-/-/1.0
BAS16	Single diode	75	100	6	0.855/1.0/-
FMMD914	Single diode	75	75	4/8	1.0/-/-
HD3A	Single diode	75	100	6	1.0/-/-
BAL99	Single diode	70	100	6	0.855/1.1/1.3
BAR99	Single diode	70	100	6	0.855/1.1/1.3
BAL74	Single diode	50	150	4	-/-/1.0
BAR74	Single diode	50	150	4	-/-/1.0
FMMD6050	Single diode	70	100	6	-/-/1.1
FMMD6100	Dual diode with common cathode	70	200	5	0.7/-/1.1
BAV70	Dual diode with common cathode	70	100	6	0.855/1.1/1.3
BAV74	Dual diode with common cathode	50	150	4	-/-/1.0
HD2A	Dual diode with common cathode	75	100	6	1.0/-/-
FMMD2837	Dual diode with common cathode	30	100	6	1.0/1.0/1.2
FMMD2838	Dual diode with common cathode	50	100	6	1.0/1.0/1.2
BAV99	Dual diode with series connection	70	100	6	0.855/1.1/1.3
FMMD7000	Dual diode with series connection	70	200	15	0.7/-/1.1
BAW56	Dual diode with common anode	70	100	6	0.855/1.1/1.3
HD4A	Dual diode with common anode	75	100	6	1.0/-/-
FMMD2836	Dual diode with common anode	75	100	6	1.0/1.0/1.2
FMMD2835	Dual diode with common anode	35	100	6	1.0/1.0/1.2

R.F. TRANSISTORS AND DIODES

TABLE 5: SOT-23 ABRUPT TUNER DIODES

Type	Reverse breakdown Voltage V_R Volts max.	Nominal capacitance at $V_R=4V$, $f=1MHz$ C_{tot} pF			Capacitance ratio $f=1MHz$ C_2/C_{30} Min.	Q at $V_R=4V$ $f=50MHz$ Min.	Marking
		Min.	Typ.	Max.			
FMMV2101	30	6.12	6.8	7.48	2.7	450	6R
FMMV2102	30	7.4	8.2	9.1	2.7	450	6F
FMMV2103	30	9.0	10.0	11.0	2.7	400	6G
FMMV2104	30	10.8	12.0	13.2	2.8	400	6H
FMMV2105	30	13.5	15.0	16.5	2.8	400	6J
FMMV2106	30	16.2	18.0	19.8	2.8	350	6K
FMMV2107	30	19.8	22.0	24.2	2.8	350	6L
FMMV2108	30	24.3	27.0	29.7	2.8	300	6M
FMMV2109	30	29.7	33.0	36.3	2.8	200	6N

TABLE 6: E-LINE SCHOTTKY BARRIER DIODES

These devices have a high breakdown voltage and ultra fast switching capabilities. R.F. applications include low noise mixers, large and small signal detectors, limiters and discriminators. Applications under pulsed conditions include ultra high speed switching, clamping, sampling gates and pulse shaping.

CHARACTERISTICS (at 25°C ambient temperature)

Type	V_{BR} at $I_R=10\mu A$ min. (volts)	V_F at $I_F=1mA$ max. (mV)	I_R max. nA at V_R (volts)		I_F at $V_F=1V$ min. (mA)	C_T at $V_R=0V$ $f=1MHz$ max. (pF)	P_{tot}^* mW
ZC2800	70	410	200	50	15	2.0	250
ZC2811	15	410	100	10	20	1.2	250
ZC5800	50	410	200	35	15	2.0	250

*Power Dissipation derate to zero at 200°C and measured using an infinite heat sink.

Operating Temperature t_{amb} -65 to +200°C.

Storage Temperature T_{stg} -65 to +200°C

Note: Matched pairs or Quads of diodes can be supplied on request.

STANDARD MATCHING SPECIFICATIONS (all packages):

ZC2800-ZC5800

ZC2811

Max. $\Delta V=20mV$, $I_F=0.5$ to 5.0mA

Max. $\Delta V=20mV$, $I_F=1$ to 10mA

Max. $\Delta C=0.2pF$, $V_R=0V$

Max. $\Delta C=0.2pF$, $V_R=0V$

TABLE 7: SOT-23 SCHOTTKY BARRIER DIODES

Type	V_{BR} at $I_R=10\mu A$ Min. (volts)	V_F at $I_F=1mA$ Max. (mV)	I_R Max. nA at V_R (volts)		I_F at $V_F=1V$ Min. (mA)	C_T at $V_R=0V$ $f=1MHz$ Max. (pF)	Marking
ZC2800E	70	410	200	50	15	2.0	E6
*ZC2810E	20	410	100	15	35	1.2	E7
ZC2811E	15	410	100	10	20	1.2	E8
ZC5800E	50	410	200	35	15	2.0	E9

*Not recommended for New Design - In (ZC2810E)