

GaAs Switches

T-51-11

(Listed by increasing Number of Throws, Frequency and I.L.)

Model No.	Type	Freq. Range (MHz)	I.L. Typ	Isolation (dB) Typ	VSWR Typ	Terms OHMS	Driver	Package Type
TWM6001	SPST	10-1500	1.2	35	1.25:1	50	TTL	T-5
TWR6000	SPST	10-1500	2.5	80	1.25:1	OPEN	TTL	T-8
TWN6002	SPST	10-2000	1.2	35	1.25:1	50	TTL	SM-2
TWP2209	SPST	DC-3000	0.7	45	1.15:1	50	0/-5V	FP-7
TWK2213	SPST	DC-3000	0.7	55	1.15:1	50	0/-5V	T-2
TWP2214	SPST	DC-3000	0.7	55	1.15:1	50	0/-5V	FP-12
TWN2278	SPST	DC-3000	0.9	55	1.1:1	50	0/-5V	SM-2
TWD2215	SPST	5-3000	1.0	60	1.2:1	50	TTL	DP-3
TWD2216	SPST	5-3000	1.0	60	1.2:1	50	CMOS	DP-3
TWP2231	SPST	5-3000	1.0	55	1.2:1	50	TTL	FP-13
TWP2232	SPST	5-3000	1.0	55	1.2:1	50	CMOS	FP-13
TWK2224	SPDT	DC-2000	0.6	40	1.15:1	OPEN	TTL	T-2
TWP2225	SPDT	DC-2000	0.6	35	1.1:1	OPEN	TTL	FP-12
TWD2217	SPDT	5-2000	1.0	55	1.2:1	OPEN	TTL	DP-3
TWD2218	SPDT	5-2000	1.0	55	1.2:1	OPEN	CMOS	DP-3
TWP2233	SPDT	5-2000	1.0	50	1.2:1	50	TTL	FP-13
TWP2234	SPDT	5-2000	1.0	55	1.2:1	OPEN	TTL	FP-13
TWK2201	SPDT	DC-3000	0.5	50	1.15:1	OPEN	0/-5V	T-2
TWP2202	SPDT	DC-3000	0.5	50	1.15:1	OPEN	0/-5V	FP-12
TWP2219	SPDT	DC-3000	0.5	40	1.15:1	OPEN	0/-5V	FP-7
TWK2203	SPDT	DC-3000	0.8	50	1.15:1	50	0/-5V	T-2
TWP2204	SPDT	DC-3000	0.8	50	1.15:1	50	0/-5V	FP-12
TWD2207	SPDT	DC-3000	0.8	45	1.2:1	OPEN	TTL	DP-3
TWD2208	SPDT	DC-3000	0.8	45	1.2:1	OPEN	CMOS	DP-3
TWP2238	SPDT	5-3000	0.9	50	1.2:1	OPEN	CMOS	FP-13
TWD2205	SPDT	5-3000	1.2	55	1.2:1	50	TTL	DP-3
TWD2206	SPDT	5-3000	1.2	55	1.2:1	50	CMOS	DP-3
TWD2241	SP3T	5-2000	1.0	60	1.2:1	50	TTL	DP-10
TWD2242	SP3T	5-2000	1.0	60	1.2:1	OPEN	TTL	DP-10
TWD2244	SP3T	5-2000	1.0	60	1.2:1	50	CMOS	DP-10
TWD2245	SP3T	5-2000	1.0	60	1.2:1	OPEN	CMOS	DP-10
TWP2247	SP3T	5-2000	1.0	55	1.2:1	50	TTL	FP-14
TWP2248	SP3T	5-2000	1.0	55	1.2:1	OPEN	TTL	FP-14
TWP2251	SP3T	5-2000	1.0	55	1.2:1	50	CMOS	FP-14
TWP2252	SP3T	5-2000	1.0	55	1.2:1	OPEN	CMOS	FP-14
TWD2254	SP4T	5-2000	1.0	55	1.2:1	50	TTL	DP-10
TWD2255	SP4T	5-2000	1.0	55	1.2:1	OPEN	TTL	DP-10
TWD2257	SP4T	5-2000	1.0	55	1.2:1	50	CMOS	DP-10
TWD2258	SP4T	5-2000	1.0	55	1.2:1	OPEN	CMOS	DP-10
TWP2261	SP4T	5-2000	1.0	55	1.2:1	50	TTL	FP-14
TWP2262	SP4T	5-2000	1.0	55	1.2:1	OPEN	TTL	FP-14
TWP2264	SP4T	5-2000	1.0	55	1.2:1	50	CMOS	FP-14
TWP2265	SP4T	5-2000	1.0	55	1.2:1	OPEN	CMOS	FP-14
TWN2243	SP4T	DC-3000	0.7	40	1.2:1	OPEN	0/-5V	SG-5
TWN6003	SP6T	DC-1500	1.5	45	1.25:1	50	TTL	SG-2
TWP6004	SP7T	DC-2000	1.5	45	1.25:1	50	TTL	FP-9

Outline Drawings

All unmarked Pins are internally grounded.

T2 (TO-5 Package)

Model No.	IN1	IN2	A	B	DC	A	B	CTL
TWR2213	2	6	3	5	N/A	N/A	N/A	N/A
TWR2224	2	6	3	5	8	N/A	N/A	N/A
TWR2224	2	6	N/A	N/A	8	3	5	4

T4 (TO-8 Package)

T5 (5 Pin TO-8 Package)

T7 (TO-12 Package)

T8 (TO8-B Package)

T10 (TO-39 Package)

SM1 (Surface Mount Package)

SM2 (Surface Mount Package)

Model No.	Is	Out	DC	A	B	CTL
AB Amps	3	1	2	N/A	N/A	N/A
TWR2278	3	1	N/A	4	2	N/A
TWR9002	1	3	2	N/A	N/A	4

SM3 (Surface Mount Package)

SM4 (Surface Mount Package)

Outline Drawings All unmarked Pins are internally grounded.

DP1 (Dip)

RF IN, RF OUT, 2 HOLES 0.93 DIA THRU, GROUND, VDC DARK GLASS, 0.45, 1.18, 0.80, 0.275 TYP, 0.18 DIA TYP, 0.46, 0.56

DP3 (Dip)

0.87, 0.200 MAX, 0.018 ± 0.005 DIA, 14 PINS, 0.120 MIN, 0.100 TYP, 0.300, 0.50, 0.10, 0.13, PIN 8, RF1, RF2, CTL

Model No.	COM	RF1	RF2	+V	CTL
ALL	4	5	8	7	1
TW5001 ONLY	4	14	8	3	5

RF 2 not used on SPST Switches
+V = +5 Vdc / +15V

DP5 (Dip)

1.37, 0.200 MAX, 0.018 ± 0.005 DIA 24 PINS, 0.129 MIN, 0.100 TYP, PIN 1, 0.600, 0.80, 0.10, 0.14, PIN 13

Model No.	COM	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	CTL	CTL	CTL	CTL	+	-
TAD5003	7	1	24	13	42	N/A	N/A	N/A	N/A	21	20	17	16	18	N/A
TAD5004	7	1	24	13	12	N/A	N/A	N/A	N/A	20	18	16	17	21	16
TAD5005	19	1	3	10	12	13	15	22	24	5	6	7	N/A	8	17

Model No.	RF Input	RF Output	dB	1.9	2.8	3.8	4.8	6.8	8.8	12	16	24	30	+	-
TAD2106	24	13	N/A	6	7	N/A	8	9	N/A	5	N/A	N/A	1	3	3
TAD5006	24	13	N/A	N/A	5	N/A	8	N/A	10	N/A	3	N/A	1	N/A	1
TAD5007	24	13	N/A	N/A	N/A	5	N/A	8	N/A	10	N/A	3	N/A	1	N/A
TAD5008	24	13	N/A	N/A	6	N/A	7	N/A	8	N/A	9	N/A	5	1	N/A

DP-5 Digital Attenuators

DP8 (Dip)

1.990, 250 MAX, 250 to 270, 0.018 ± 0.005 DIA 36 PINS, 1.800, 100 TYP (36 PLACES), PIN 1, 0.800, 0.950, 0.085, PIN 20

Model No.	RF Input	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	+	-
TAD5009	36	20	13	8	11	N/A	15	N/A	7	N/A	9	N/A	11	N/A	13	N/A	15	17	5	1	N/A	N/A	N/A
TAD5010	36	20	N/A	N/A	N/A	7	N/A	9	N/A	11	N/A	13	N/A	15	17	5	1	N/A	N/A	N/A	N/A	N/A	N/A

DP-8

DP10 (Dip)

0.970 ± 0.020, 200 MAX, 0.120 MIN, 0.018 ± 0.005 DIA, 16 PINS, 0.100 TYP, PIN 1, 0.600, 0.80 ± 0.02, PIN 9, 0.10 ± 0.02

Model No.	COM	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	RF10	RF11	RF12	RF13	RF14	RF15	RF16
DP-10	5	1	8	9	16	15	13	12	11	10	4	3	2	1	6	7	14

RF 4 not connected on SPST Switches
+V = +5 Vdc

DP11 (Dip)

0.775 ± 0.020 SQ, 0.018 ± 0.005 TYP, PIN DIA 14 PLACES, 0.230 MAX, 0.12 MIN, PIN 1, 0.600, 0.09, PIN 8, 6 EQUAL SPACES AT 0.10 TOTAL NON-ACCUMULATIVE

Model No.	RF COM	RF 1	RF 2	RF 3	RF 4	CTL
TW5002	11	1	7	5	3	4

DP-11 Switch

Model No.	RF Input	RF Output	dB	1.9	2.8	3.8	4.8	6.8	8.8	12	16	24	30	+	-
TAD5002	1	12	3	11	12	4	10	5	1	N/A	N/A	6	5	1	N/A

DP-11 Digital Attenuator

SG5 (Gull Wing Surface Mount Package)

0.55 ± 0.007 16 PL, 0.005 ± 0.001 16 PL, 100 ± 0.010 16 PL, 190 SQ, 0.25 ± 0.005, 0.25 ± 0.005, 0.75 MAX, FLUSH TO +.010, 0.32X R 0.10 MAX, 0.50, 4 PL, 0.15, 16 PL, 0.50, 12 PL, 250 SQ, 0.085, 12 PL, 0.15, 16 PL, 0.05, 4 PL, 0.085, 12 PL, 250 SQ, ORIENTATION MARK (PIN 9)

Model No.	COM	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	RF10	RF11	RF12	RF13	RF14	RF15	RF16
TW52243	1	8	13	15	2	3	5	4	9	10	11	12	14	16	7	6	17

SG-5

SG2 (Gull Wing Surface Mount Package)

750, 125, 0.080 TYP (24 PLACES), 0.500, 750, PIN 1, 0.150 MAX, 0.42 ± 0.007, 0.10 RAD. MAX. TYP, FLUSH TO ± 0.010 -0.000, 0.090 ± 0.010, 0.085, 0.10 ± 0.002, 12 PL, PIN 14

Model No.	COM	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	RF10	RF11	RF12	RF13	RF14
TW5003	7	15	17	19	21	23	25	13	3	4	5	6	8	14	16

SG-2

Outline Drawings All unmarked Pins are internally grounded.

FP2 (Flatpack)

0.38
0.30
0.20
0.25
0.20 (5.1)
0.08 (1.31)
0.2 (0.46)
DIA (4) PLACES
0.15 (3.81)
0.50 (12.70)
0.50 (12.70)

FP4 (Flatpack)

0.38
0.30
0.25
0.20 (5.1)
0.08 (1.31)
0.2 (0.46)
DIA (4) PLACES
0.15 (3.81)
0.50 (12.70)
0.50 (12.70)

FP7 (Flatpack)

0.100 SQ. MAX
0.250 MIN
0.015 ±0.003 TYP
3 EQUAL SPACES @ 0.050 (1.27) TOLERANCE NON-CUMULATIVE
0.025
0.005 ±0.002

Model No.	RF COM	RF1	RF2	A	B
SPST	N/A	8	5	2	3
SPDT	1	3	6	4	5

FP9 (Flatpack)

750
125
0.50 TYP
24 PLACES
750
600
150 MAX
0.065

Model No.	COM	RF1	RF2	RF3	RF4	RF5	RF6	RF7	-V	CTL	CTL
TWP6004	7	14	16	18	20	22	24	26	13	3	4

FP10 (Flatpack)

115
1.130 ± 0.015
900
500 MIN TYP
398
0.795 ± 0.015
109 DIA THRU 2 PL
0.15 DIA, 10 PL
175 MAX
0.015

FP11 (Flatpack)

51
25
28 TYP
0.020
0.013 DIA TYP
0.02
51
205 MAX
110
140 TYP
0.080 TYP
160

Model No.	Out	RF1	RF2	RF3
W003	7	3	1	

FP12 (Flatpack)

0.375 ± 0.020
0.015 DIA ± 0.005
6 PLACES
0.375 ± 0.020
0.312 MIN TYP
0.088
0.100
0.200
0.080
0.125 MAX

Model No.	RF1	RF2	COM	A	B	-S	-R	CTL
TWP2214	2	4	N/A	1	3	N/A	N/A	N/A
TWP2282	4	6	2	1	3	N/A	N/A	N/A
TWP2225	4	6	2	N/A	N/A	1	3	4

FP13 (Flatpack)

0.110 TYP
0.325 MIN
0.490
0.820 ± 0.005
DIA 14 PLACES
0.070
0.145 MAX
RF 2 not connected on SPST
+V = +5 Vdc

FP14 (Flatpack)

0.150 TYP
0.325 MIN
0.800
1.000 ± 0.005
0.015 ± 0.005 DIA 16 PLACES
0.070
0.145
RF 4 not connected on SPST
+V = +5 Vdc