

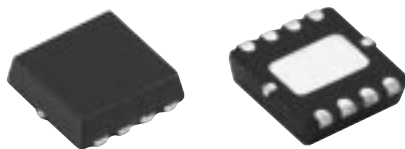
High Isolation

Switches

SPDT, DC to 4.5 GHz

M3SW-2-50DR
M3SWA-2-50DR

NEW!



CASE STYLE: DL805
PRICE: \$4.95 ea
QTY.: (10-49)

Features

- high isolation, 55 dB typ. at 1 GHz
- low insertion loss, 0.7 dB typ.
- integral TTL driver
- miniature case style DL805

Applications

- transfer/receiver isolation
- automated switching networks

Electrical Specifications (T_{AMB}= 25°C)

MODEL NO.	FREQ. (GHz)	REFLECTIVE	ABSORPTIVE	INSERTION LOSS (dB)								IN-OUT ISOLATION (dB)								1 dB COMPRESSION (dBm)							
				FREQUENCY BAND								FREQUENCY BAND								FREQUENCY BAND							
				A1		A		B		C		A1		A		B		C		A1*		A		B		C	
				Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.
M3SW-2-50DR	DC-4.5	•	•	0.6	1.0	0.7	1.2	0.9	1.4	1.5	2.0	75	60	47	43	35	32	24	20	20	25	25	20	20			
M3SWA-2-50DR	DC-4.5	•	•	0.6	1.0	0.7	1.2	0.9	1.4	1.4	2.2	80	60	55	43	43	38	24	20	20	25	25	20	20			

A1= DC-100 MHz, A= 0.1-1 GHz, B= 1-2 GHz, C= 2-4.5 GHz

* Drops to 17.0 dBm at 10 MHz.

additional specifications

TTL Control Voltage	0 min., 0.8 max.
Low threshold, V	2 min., 5 max.
High threshold, V	
TTL Control Current	
High V, mA	5 max.
Low V, mA	0.2 max.
Positive Supply V.	5±0.2
Negative Supply V.	-5±0.2
+5V power supply current, mA	5 typ., 9 max.
-5V power supply current, mA	5 typ., 9 max.
*VSWR (1)	1.1 typ. to 2 GHz 1.25 typ. to 4.5 GHz
Rise/ Fall time (10%-90%), ns	5 typ., 10 max.
Switching time, 50% of Control to 90% RF (Turn-on), ns	10 typ., 15 max.
to 10% RF (Turn-off), ns	
**Video Leakage, mVp-p	30 typ.
Temperature, °C operating	-40 to 85
storage	-55 to 100

NOTES:

* For all states of absorptive switch, and for reflective switch in "ON" condition; for reflective switch "OFF" port, 5:1 VSWR typ.

** Video leakage or break through is defined as leakage of TTL switching signal to RF output ports.

1. Absolute maximum power and voltage ratings:
RF input power, 250 mW,
Supply voltage: ±6 V DC
2. OFF state of RF output is low impedance.
3. Prices and specifications subject to change without notice.

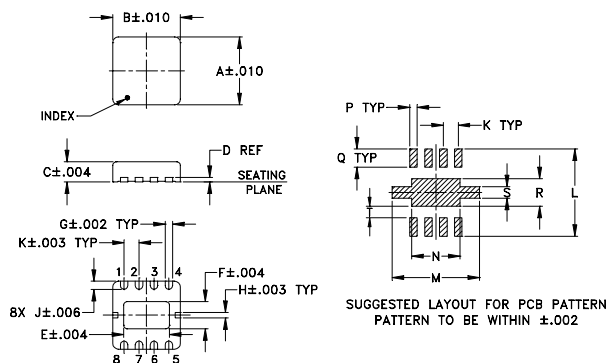
control logic

TTL Control Port	RF outputs	
	1	2
High	Off	On
Low	On	Off

Pin Configuration

RF IN	6
RF OUT 1	1
RF OUT 2	4
TTL IN	2
+5V	5
-5V	7
TTL GND	3
GND	8
GND	PADDLE

Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J	
.118	.118	.035	.008	.080	.047	.013	.009	.014	
3.00	3.00	0.89	0.20	2.03	1.19	0.33	0.23	0.36	
K	L	M	N	P	Q	R	S	T	wt.
.026	.148	.148	.084	.013	.030	.048	.020	.020	grams
0.66	3.76	3.76	2.13	0.33	0.76	1.22	0.51	0.51	.06

REV. OR
M81236
ED-9656A
M3SW-2-50DR
RS/TD/CP
020506



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