

Preliminary

Confidential

P1/7
No. W575-STD-C

Dual Band Switchplexer®
for GSM850/1900 and GSM900/1800

Preliminary Specification

Apr. 20. 2010

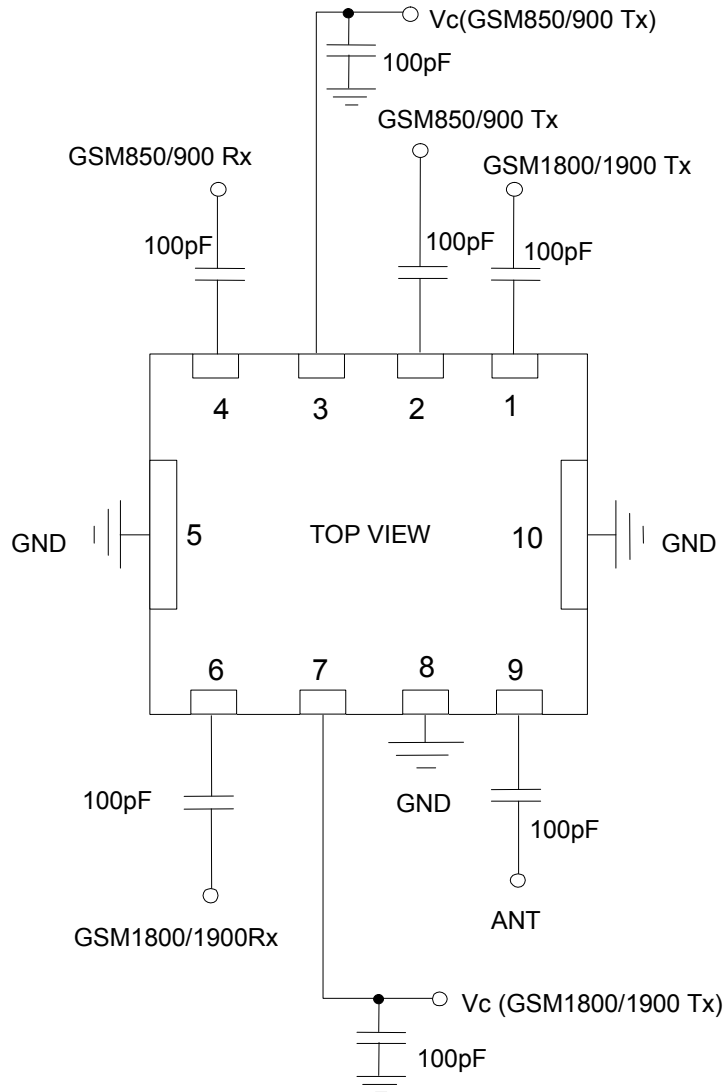
Part Number : LMSP2PAA-575

All the technical data and Information contained herein are subject to change without prior notice.

1. Part Number

Part Number	LMSP2PAA-575
Size	2.5x2.5x1.2(max) mm

2. Measurement Circuit



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3. Target Specification (at -30~+85 °C)

<GSM850 / GSM900 Band>

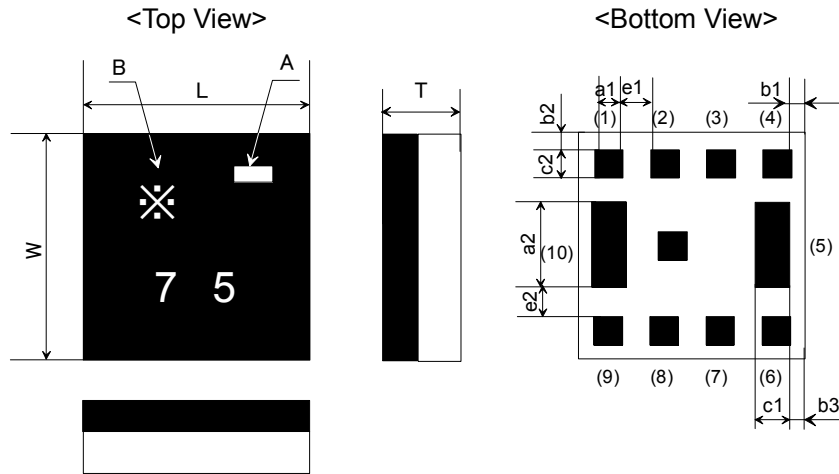
Tx mode	Frequency Range (MHz)	fatl	836.50 +/- 12.50
		fgtl	897.50 +/- 17.50
	Insertion Loss (dB)	Tx-ANT	1.40 max. (at 25 deg.C)
			1.50 max. (at -30 to +75 deg.C)
			1.55 max. (at -30 to +85 deg.C)
	Ripple (dB)	Tx-ANT	0.50 max
	Attenuation (Absolute value)(dB)	Tx-ANT	25.0 min. at 2 x fatl MHz
			28.0 min. at 2 x fgtl MHz
			30.0 min. at 3 x fatl MHz
			30.0 min. at 3 x fgtl MHz
	V.S.W.R.	Tx,ANT	2.0 max.
	Isolation (dB)	Tx-GSM850/900Rx	20.0 min.
		Tx-GSM1800/1900Rx	19.0 min.
Current Consumption	Tx-ANT	10.0 mA max.	
Harmonics (dBc)	Tx-ANT	-70.0 min. at 2 x fatl, fgtl MHz	
		-70.0 min. at 3 x fatl, fgtl MHz	
Power Capacity (dBm)		35.0 max.	
Rx mode	Frequency Range (MHz)	farl	881.50 +/- 12.50
		fgrl	942.50 +/- 17.50
	Insertion Loss (dB)	ANT-Rx	1.10 max. (at 25 deg.C)
			1.25 max. (at -30 to +75 deg.C)
			1.30 max. (at -30 to +85 deg.C)
	Ripple (dB)	Rx-ANT	0.50 max
V.S.W.R.	ANT ,Rx	2.00 max.	
Isolation (dB)	Tx-ANT (at fatl, fgtl MHz)	20.0 min.	

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<GSM1800 / GSM1900 Band>

Tx mode	Frequency Range (MHz)	fdth	1747.50 +/- 37.50
		fpth	1880.00 +/- 30.00
	Insertion Loss (dB)	Tx-ANT	1.50 max. (at 25 deg.C)
			1.65 max. (at -30 to +75 deg.C)
			1.70 max. (at -30 to +85 deg.C)
	Ripple(dB)	Tx-ANT	0.5 max.
	Attenuation (Absolute value)(dB)	Tx-ANT	30.0 min. at 2 x fdth MHz
			28.0 min. at 2 x fpth MHz
			25.0 min. at 3 x fdth MHz
			25.0 min. at 3 x fpth MHz
	V.S.W.R.	Tx,ANT	2.00 max.
Isolation (dB)	Tx-GSM850/900Rx	20.0 min.	
	Tx-GSM1800/1900	20.0 min.	
Current Consumption	Tx-ANT	10.0 mA max.	
Harmonics (dBc)	Tx-ANT	-67.0 min. at 2 x fdth, fpth MHz	
		-67.0 min. at 3 x fdth, fpth MHz	
Power Capacity (dBm)		33.0 max.	
Rx mode	Frequency Range (MHz)	fdrh	1842.50 +/- 37.50
		fprh	1960.00 +/- 30.00
	Insertion Loss (dB)	ANT-Rx	1.20 max. (at 25 deg.C)
			1.35 max. (at -30 to +75deg.C)
			1.40 max. (at -30 to +85deg.C)
	Ripple(dB)	Rx-ANT	0.50 max.
V.S.W.R.	ANT,Rx	2.00 max.	
Isolation (dB)	Tx-ANT(at fdth, fpth MHz)	17.0 min.	

4. Dimension



Mark	Meaning
A	Pin 1 Marking
B	Date Code (EIAJ)

(in mm)

Mark	Dimensions	Mark	Dimensions	Mark	Dimensions
L	2.5±0.2	a2	0.9±0.1	c1	0.4±0.1
W	2.5±0.2	b1	0.2±0.2	c2	0.3±0.1
T	1.2 max.	b2	0.2±0.2	e1	0.3±0.1
a1	0.3±0.1	b3	0.2±0.2	e2	0.3±0.1

TERMINAL CONFIGURATION

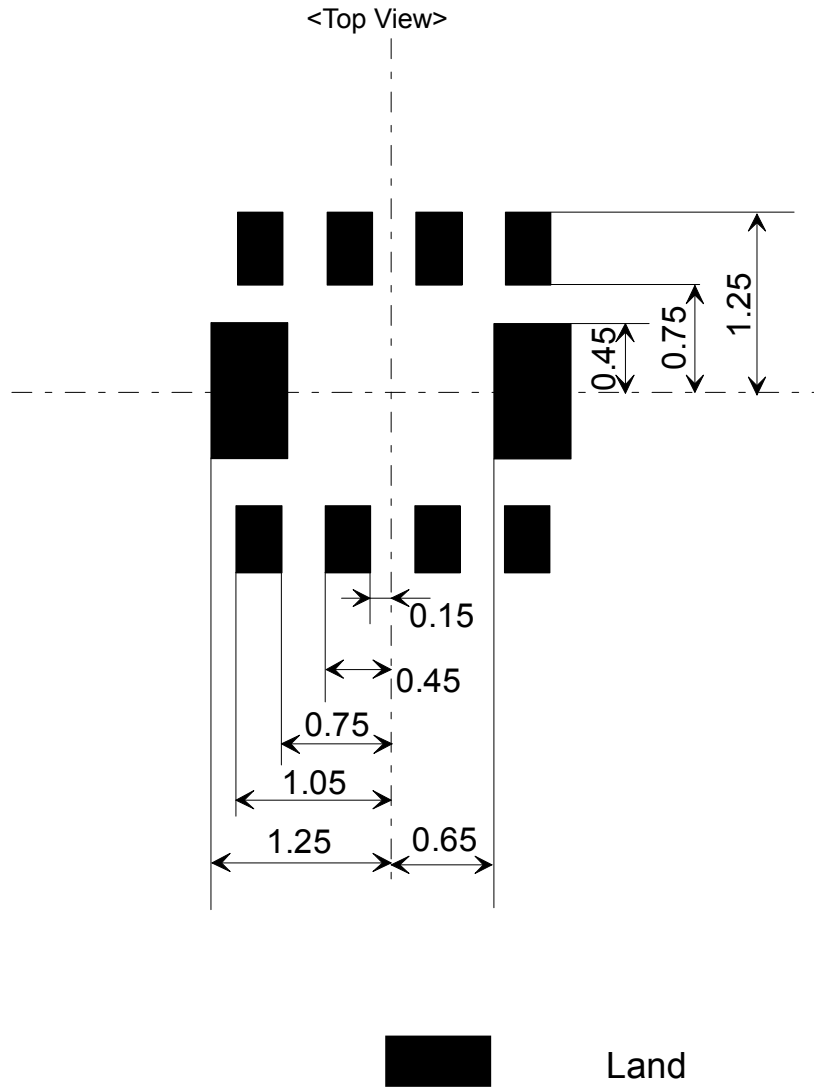
Terminal No.	Terminal Name	Terminal No.	Terminal Name
(1)	GSM1800/1900 Tx	(6)	GSM1800/1900 Rx
(2)	GSM850/900 Tx	(7)	Vc(GSM1800/1900 Tx)
(3)	Vc(GSM850/900 Tx)	(8)	GND
(4)	GSM850/900 Rx	(9)	ANT
(5)	GND	(10)	GND

CONTROL LOGIC

Mode	Vc(GSM850/900 Tx)	Vc(GSM1800/1900 Tx)	Current
GSM850/900 Tx	2.4 ~ 2.8 V	0.0 ~ 0.1 V	10mA Max.
GSM1800/1900 Tx	0.0 ~ 0.1 V	2.4 ~ 2.8 V	10mA Max.
GSM850/900/1800/1900 Rx	0.0 ~ 0.1 V	0.0 ~ 0.1 V	≈ 0mA

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5. Land pattern



Notice**Limitation of Applications:**

The product is designed and manufactured for consumer application only and is not available for any application listed below which requires especially high reliability for the prevention of such defect as may directly cause damage to the third party's life, body or property.

- Aircraft equipment.
- Aerospace equipment
- Undersea equipment.
- Medical equipment.
- Transportation equipment (vehicles, trains, ships, etc.).
- Traffic signal equipment.
- Disaster prevention / crime prevention equipment.
- Application of similar complexity and/ or reliability requirements to the applications listed in the above.