






SPECIFICATION

MODEL : IL07BL(R)0742ABE

I S O L A T O R

PARTRON CO., LTD.

22-6, Secwoo-Dong, Hwaseong-Si,
Gyeonggi-Do, Korea, 445-170

By designed	By checked	By approved
		

1. Application

This specification covers the isolator used in 728 ~ 756 system.

2. Part No**IL 07 B L(R) 0742 AB E**

IL : Isolator Group
07 : Size [7*7*2.0t]
B : Fabrication condition
L(R) : Signal direction
0742 : Center frequency [742MHz]
AB : Fabrication condition
E : Embossed plastic reel

3. Lot numbering

P 0 1

P : Partron co., Ltd.
0 : Year [0 : 2010 1 : 2011]
1 : Month [1:JAN 9:SEP 0:OCT N:NOV D:DEC]

4. Test condition**4-1 Typical condition**

Temperature : 20℃
Humidity : 65 %RH

4-2 Standard condition

Temperature : 5 ~ 35℃
Humidity : 45 ~ 85 %RH

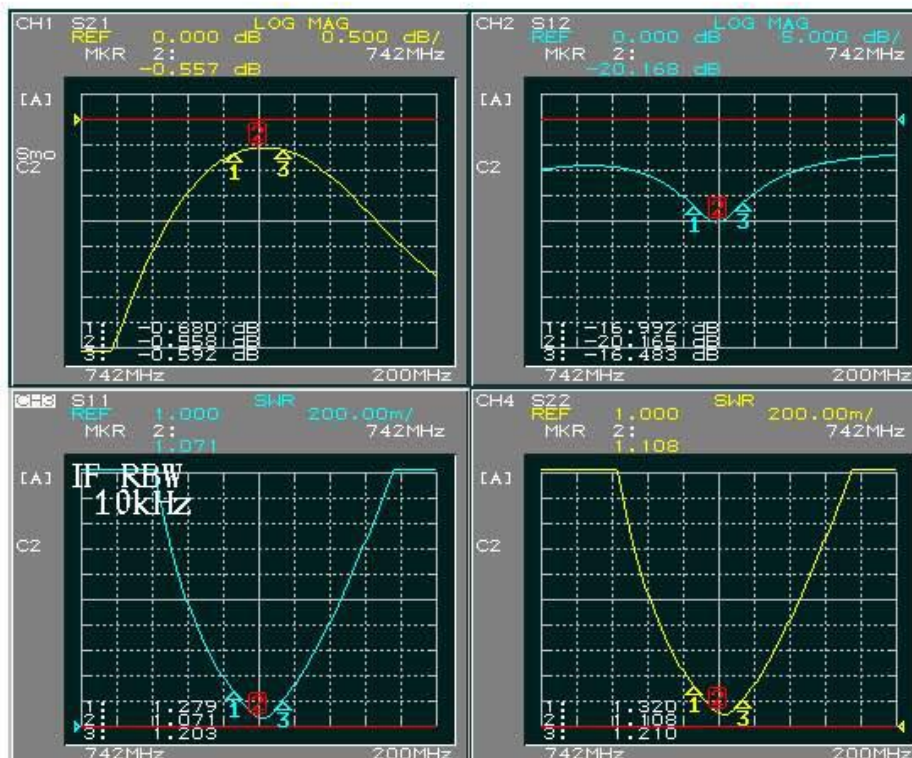
5. Temperature range

5-1 Operating : -35 ~ 85℃
5-2 Storage : -40 ~ 85℃

6. Electrical characteristics

ITEM	UNIT	SPECIFICATION	REMARKS
Frequency range	MHz	728 ~ 756	
Operating temp.	℃	-35 ~ +85	
Insertion loss	dB max.	0.8	[+15 ~ +35℃]
		0.9	[-35 ~ +85℃]
Isolation	dB min.	12	[+15 ~ +35℃]
		11	[-35 ~ +85℃]
VSWR (F),(R)	max.	1.5	[+15 ~ +35℃]
		1.6	[-35 ~ +85℃]
Rating power	W max.	10	
Reflection power	W max.	1	
Impedance	Ω	50	

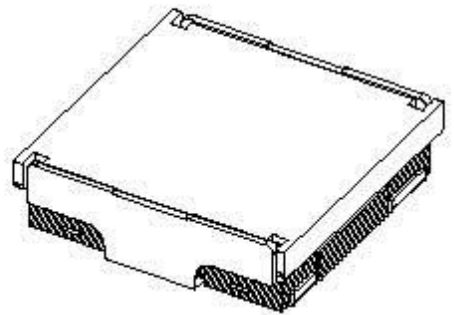
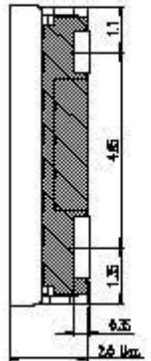
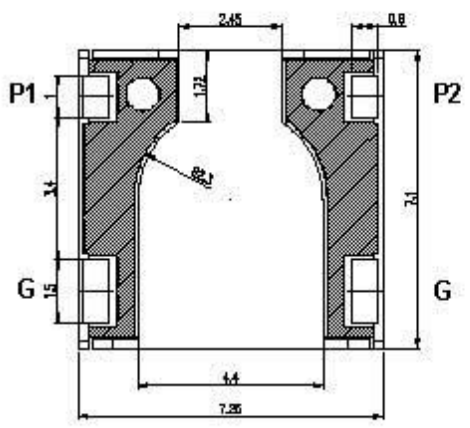
1. Case surface temperature should be less than 100℃ under the operation.
2. The measurement are done with PARTRON's standard test fixture, with which the insertion loss error within 0.15dB.
3. Agilent 8753 series N/A & Advantest R3767CH is used in the measurements.

7. Plot graph


8. Mechanical Specification

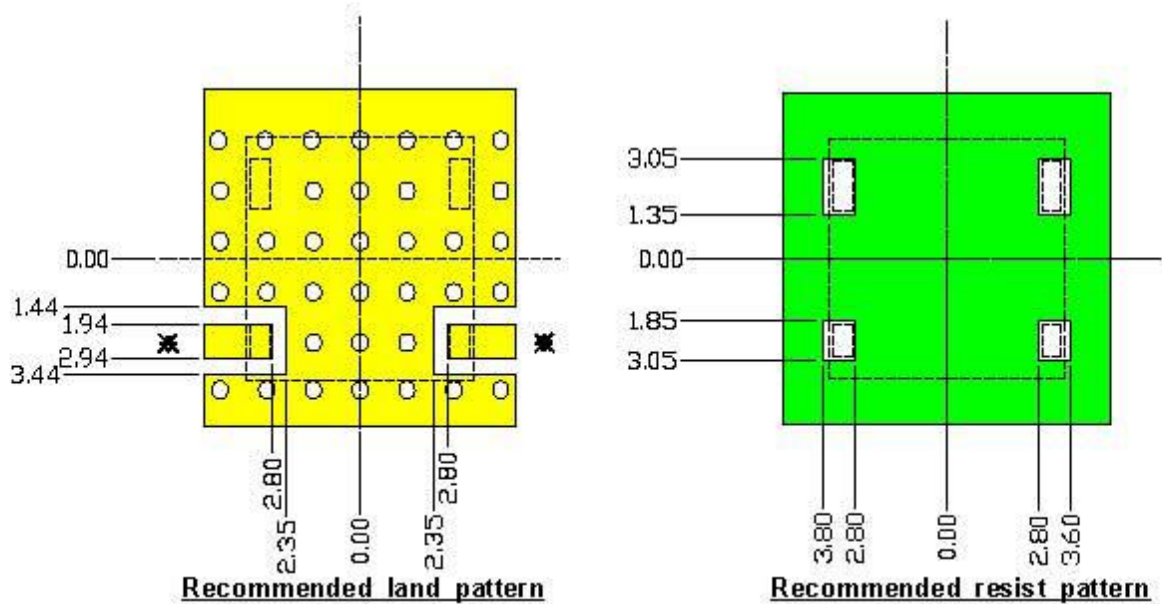


P1,P2 : IN/OUT Port
G : Ground
742M : 742MHz[fc]
●P01 :
●P01 L type [signal flow direction P1 → P2]
P01● R type [signal flow direction P2 → P1]
 [or left side dot is L type,
 right side dot is R type]
P Partron co., Ltd.
0 Year [2010]
1 Month [January]
 (Oct,Nov,Dec denoted as **O,N,D**)



Scale : N/S
 Unit : mm
 Tolerance : ±0.2

9. Recommended Soldering Pattern



Note

✳ 50 ohm transmission line

1. PCB material : FR-4 0.8t [copper clad 35um]
2. Color sections : copper pattern, solder mask pattern
3. Bottom side : ground plane
4. Unit : mm

10. Reliability specification

10-1 Environment test

ITEM	TEST CONDITION	LIMIT
High temperature resistance	+85℃±3℃, 120hr	*After the test, specimen would be kept at 25℃±5℃ for 1 hours *specimen shall meet the electrical specification
Low temperature resistance	-40℃±3℃, 120hr	
Humidity resistance	+70℃±3℃, RH90~95%, 120hr	

10-2 Thermal shock test, reflow test

ITEM	TEST CONDITION	LIMIT
Thermal shock	-40℃±3℃ (2Hr) ↔ +85℃±3℃ (2Hr) , cycle : 15cycle	SAME as 10-1
Reflow	Pre heating : 140±10℃, 60~120 sec peak heating : 240℃, 10sec Max	