



**Mentech**  
**铭普光磁**

RF Products Catalog

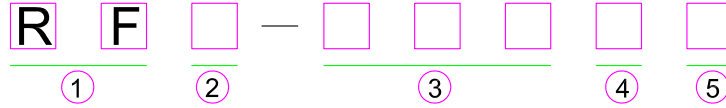
2021 A0

**Dedication to Excellence**

铭诚于心 普实于行

## Definition of Part Number

 Part Name:



## Description

① Product type                      RF   Radio Frequency Components

② Product Series                      T   Transformer Series  
    S   Splitter Series  
    C   Coupler Series

.....

③ Serial Number                      001  
    002  
    .....  
    999

④ Package                              D   Through Hole  
    S   Surface Mount(SMT)

⑤ Extracode                            G   RoHS

 Example:    RFT-001DG

RFT-001DG is the first radio frequency transformer ,with the through hole package and RoHS compliant.

We provide Low cost, high performance RF transformer,coupler and splitter products.

The product functions are: signals balance to unbalance convert, coupling, 3dB power split, frequency divide, etc. The frequency can be covered from 0.1 to 6000MHz.

Our products can be used on wireless communication,CATV-set-top-box, satellite-set-top-box,5G systems,bluetooth and wifi module, automobile Telematics systems, etc.

## RF Products Index:

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 RF Transformer Series	4-10
 RF Directional Coupler Series	11-12
 RF Splitter Series	13-14

- Miniature surface mount package
- Various impedance ratios available
- Excellent insertion loss
- Ideal for Balanced-to-Unbalanced applications
- Products from 0.05 to 6000 MHz bandwidth



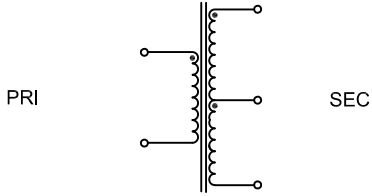
## Electrical Specifications @25°C-Operating Temperature -40°C to+85°C

Part Number	System Impedance	Impedance Ratio Pri:Sec	Bandwidth(MHzTYP)				Configuration	SMT Package
			3dB	2dB	1dB	0.5dB		
RFT-001SG	75	1:1	0.05-450	0.75-300	0.10-200	---	Config.A	1
RFT-002SG	75	1:2	---	---	3-300	---	Config.A	1
RFT-003SG	75	1:4	---	0.5-300	1.5-100	---	Config.A	1
RFT-004SG	75	1:8	0.25-500	0.3-400	0.5-200	---	Config.A	1
RFT-005SG	75	36:1	0.05-21	---	---	---	Config.A	1
RFT-006SG	50&75	1:1	1.5-500	2.5-400	5-350	---	Config.B	1
RFT-007SG	50&75	1:1	---	1.0-500	5-100	---	Config.B	1
RFT-008SG	50	1:1	800-1900	---	800-1400	---	Config.C	2
RFT-009SG	75	1:1	---	1500	4.5-1000	---	Config.C	1
RFT-010SG	50	1:1	---	1500	4.5-1000	---	Config.C	1
RFT-011SG	50&75	16:25	---	---	5-50	---	Config.A	10
RFT-012SG	50&75	1:1	---	---	1-75	---	Config.A	10
RFT-013SG	50&75	1:1	---	---	5-200	---	Config.A	9
RFT-014SG	50	1:2	---	---	3-300	---	Config.A	2
RFT-015SG	50	1:1	1.5-500	2.5-400	50-350	---	Config.B	2
RFT-016SG	75	1:3	40-1000	---	---	---	Config.F	4
RFT-017SG	50	1:4	10-100	5-400	3-800	---	Config.A	2
RFT-018SG	50	1:1	0.03-125	0.04-75	0.05-50	---	Config.A	4
RFT-018SG-C	50	1:1	0.03-125	0.04-75	0.05-50	---	Config.A	4
RFT-019SG	50	8:1	2-500	5-400	10-100	---	Config.A	2
RFT-020SG	50	1:4	10-1900	20-1000	30-700	---	Config.F	2
RFT-021SG	50	1:1	---	---	---	---	Config.A	2
RFT-022SG	50	1:1	0.1-235	0.3-150	1.0-100	---	Config.B	13
RFT-023SG	50	1:2	0.2-500	0.4-300	1-100	---	Config.A	3
RFT-024SG	50	1:1	0.4-500	0.5-300	1-100	---	Config.A	2
RFT-025SG	75	1:1	---	---	---	---	Config.-	16
RFT-026SG	75	1:1	---	---	5-100	---	Config.A	9
RFT-027SG	75	1:1	2000-3000	1200-2000	5-1200	---	Config.E	2
RFT-028SG	50&75	1:1	---	50-1200	---	---	Config.E	5
RFT-029SG	75	1:2	---	5-1200	---	---	Config.G	5
RFT-030SG	50&75	1:1	---	---	---	---	Config.H	11
RFT-031SG	75	1:1	---	4.5-1000	1000-1500	---	Config.C	8
RFT-033SG	50	1:1	---	---	5-1000	---	Config.E	2
RFT-034SG	50	1:4	10-500	---	---	---	Config.A	8
RFT-035SG	50	1:4	2-800	5-600	10-100	---	Config.A	1

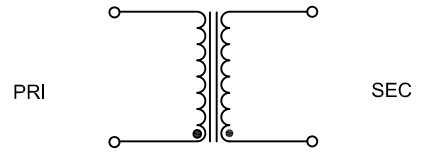
Electrical Specifications @25°C-Operating Temperature -40°C to+85°C								
Part Number	System Impedance		Bandwidth (MHz TYP)				Configuration	SMT Package
			3dB	2dB	1dB	0.5dB		
RFT-036SG	50	1:1	2000-3000	1000-2000	4.5-1000	---	Config.C	1
RFT-037SG	50	1:4	---	1-450	10-200	---	Config.A	8
RFT-038SG	75	1:1	---	---	150-200	---	Config.A	2
RFT-039SG	50&75	1:4	---	---	---	---	Config.A	10
RFT-040SG	50&75	2.25:1	---	---	---	---	Config.A	7
RFT-041SG	50	1:1	---	---	---	---	Config.A	8
RFT-042SG	75	1:1	---	---	---	---	Config.A	2
RFT-043SG	75	1:1	0.3-700	0.5-500	5-250	---	Config.A	1
RFT-044SG	75	1:4	---	5-1000	30-700	---	Config.F	1
RFT-045SG	50	1.5:1	0.5-550	1-350	2-200	---	Config.A	1
RFT-046SG	75	1:1	0.4-500	---	---	---	Config.A	1
RFT-047SG	50	1:4	0.245-425	0.475-350	5.5-215	---	Config.A	12
RFT-048SG	50	1:4	500-2500	700-1500	750-1200	---	Config.F	2
RFT-049SG	50	1:3	---	2-500	5-300	---	Config.A	2
RFT-051SG	50	1:1	---	---	---	---	Config.A	10
RFT-052SG	75	1:1	---	---	5-1800	---	Config.C	6
RFT-054SG	50	1:1	0.05-200	0.08-150	0.2-80	---	Config.H	15
RFT-055SG	50	1:4	0.14-700	0.2-400	0.4-150	---	Config.A	14
RFT-056SG	75	4:9	5-100	---	---	---	Config.A	10
RFT-057SG	75	1:1	---	5-100	---	---	Config.A	10
RFT-058SG	50	1:1	0.005-100	---	---	---	Config.H	12
RFT-059SG	75	1:1	2	---	4-20	---	Config.B	8
RFT-060SG	75	1:1	---	---	---	5-50	Config.A	8
RFT-061SG	75	1:1	---	---	46-1002	---	Config.C	1
RFT-062SG	50&75	1:4	---	5-1000	50-879	---	Config.F	8
RFT-063SG	50	9:1:9	---	---	---	---	Config.D	17
RFT-064SG	50	1:1:1:4	---	1.8-90	---	---	Config.I	17
RFT-065SG	75	1:1	---	---	1-400	---	Config.A	18
RFT-066SG	50	1:4	---	40-1000	---	---	Config.F	10
RFT-068SG	75	1:1	0.4-800	0.5-700	1-400	---	Config.A	18
RFT-069SG	50	1:1	2-70	---	---	---	Config.A	17
RFT-070SG	75	1:0.67	---	---	5-100	---	Config.A	10
RFT-072SG	50	1:1	2000-3000	1000-2000	4.5-1000	---	Config.C	1
RFT-073SG	75	1:1:16	5-100	---	---	---	Config.A	10
RFT-075SG	50	1:4	1200-3000	500-700	700-1200	---	Config.F	1
RFT-076SG	50	1:4	200-1400	300-1300	800-1100	---	Config.A	1
RFT-078SG	75	4:4:1	---	---	2-100	---	Config.D	19
RFT-079SG	50	1:1	1-1000	---	---	---	Config.C	10
RFT-080SG	50	1:4	3-800	5-400	10-100	---	Config.A	2
RFT-081SG	75	1:1	5-3000	50-2150	---	---	Config.C	8
RFT-083SG	50	1:4	1-300	470-870	---	---	Config.A	2

## SCHEMATICS

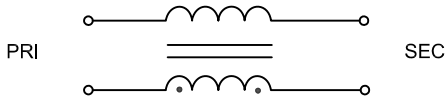
Config. A



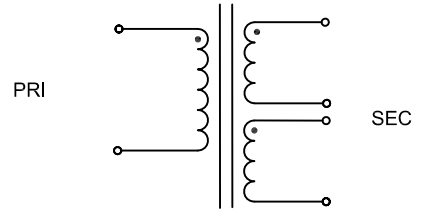
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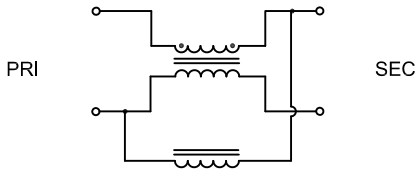
Config. C



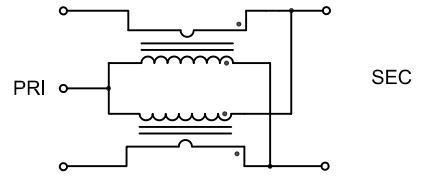
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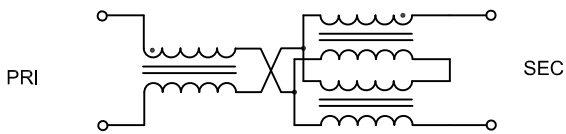
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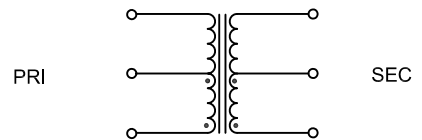
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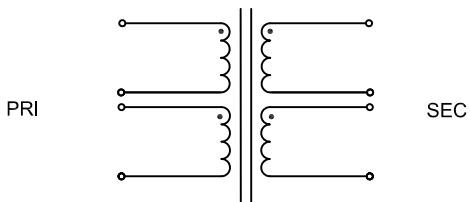
Config. G



Config. H

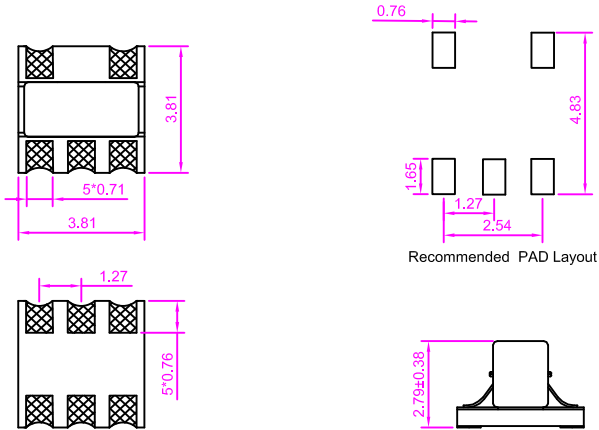


Config. I

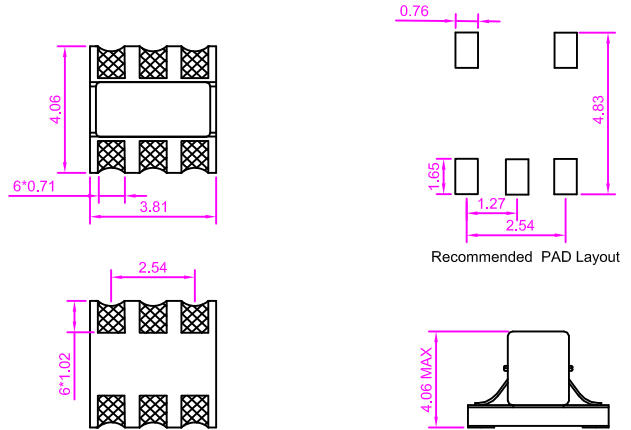


## MECHANICAL

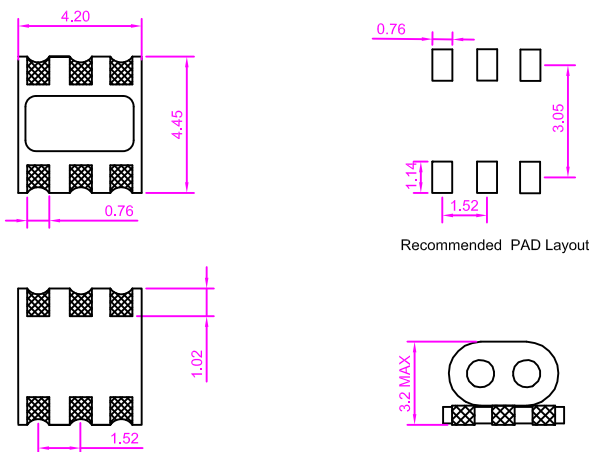
SMT .1



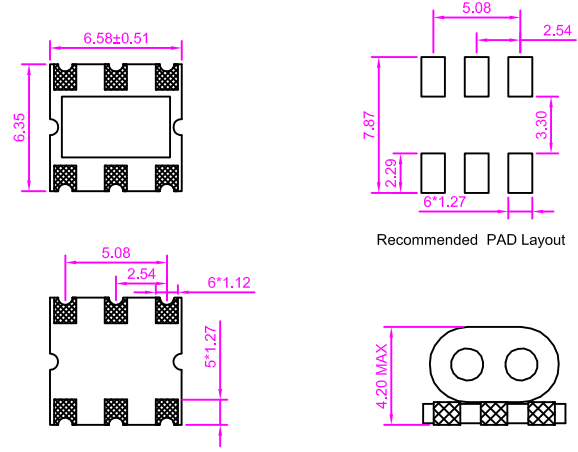
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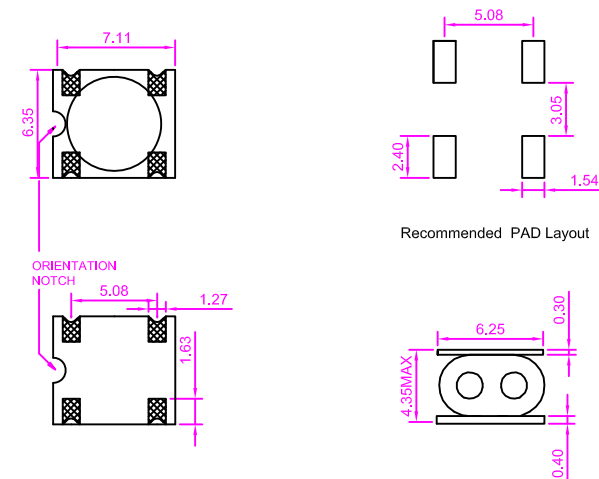
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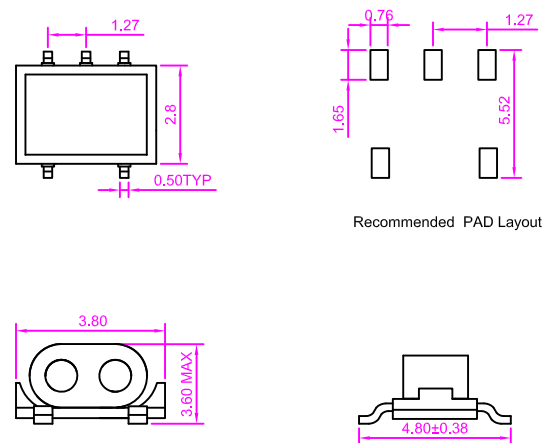
SMT .4



SMT .5

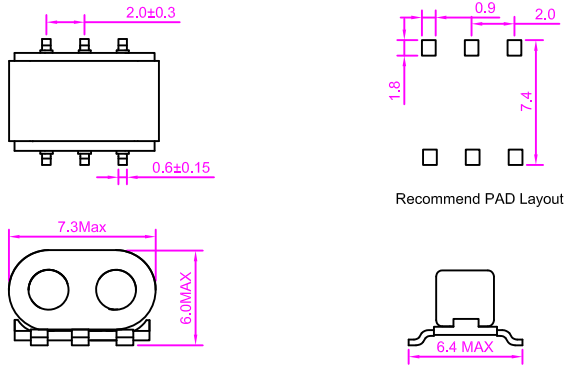


SMT .6

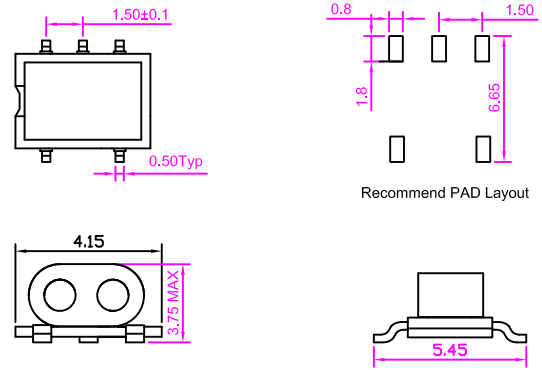


## MECHANICAL

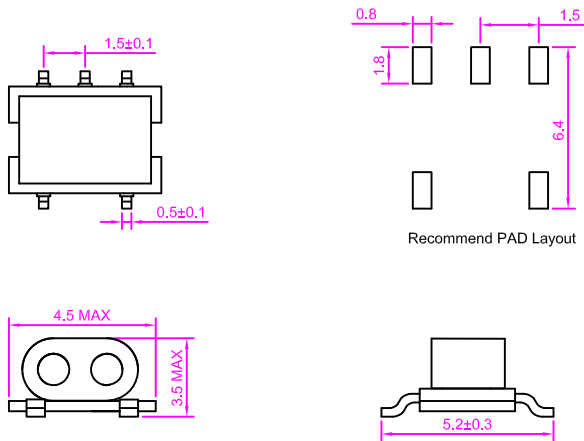
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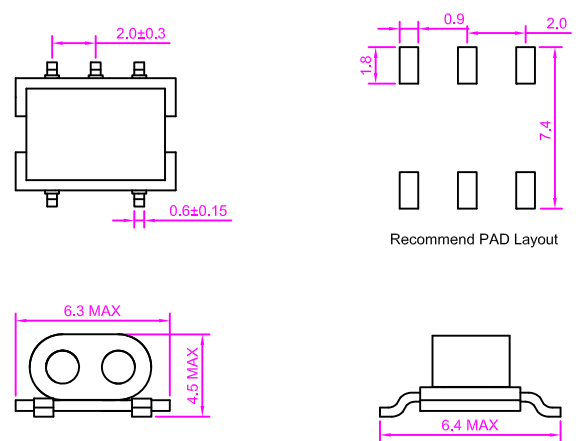
SMT .8



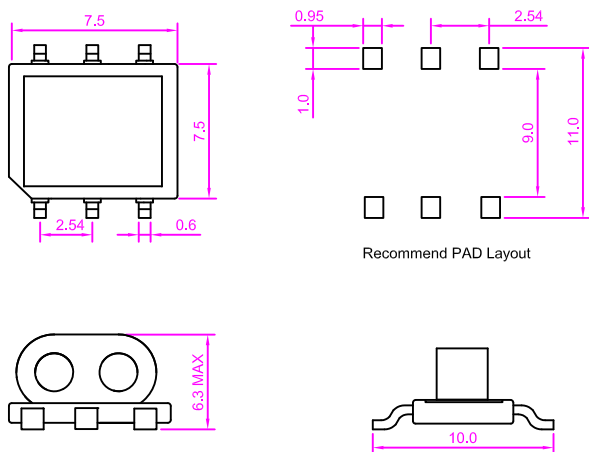
SMT .9



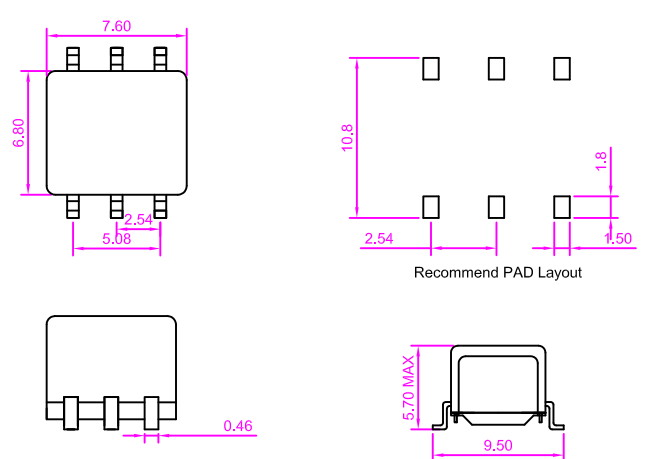
SMT .10



SMT .11



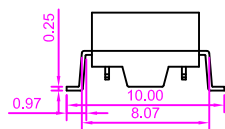
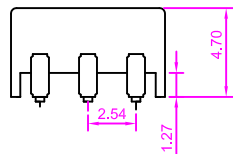
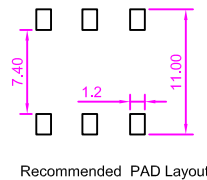
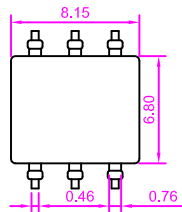
SMT .12



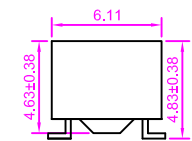
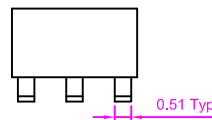
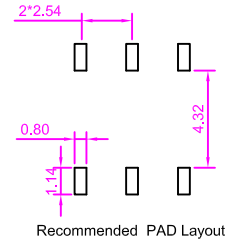
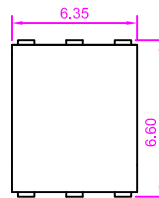


## MECHANICAL

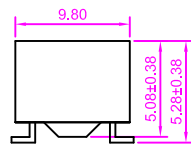
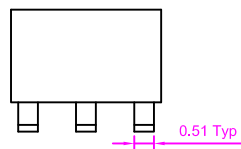
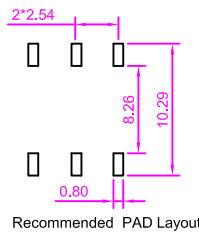
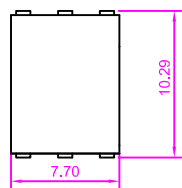
SMT .13



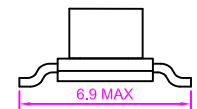
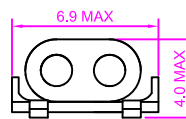
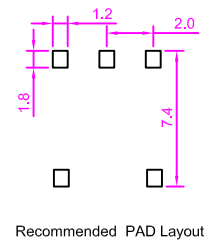
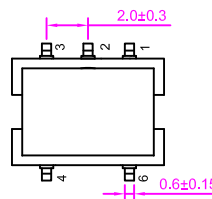
SMT .14



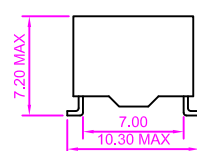
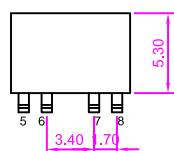
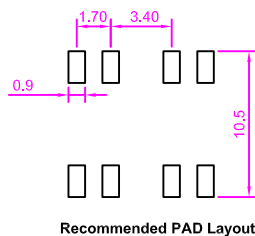
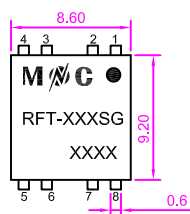
SMT .15



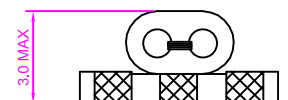
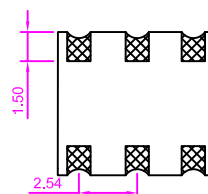
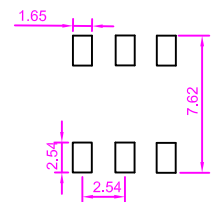
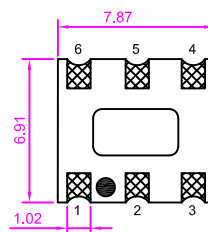
SMT .16



SMT .17

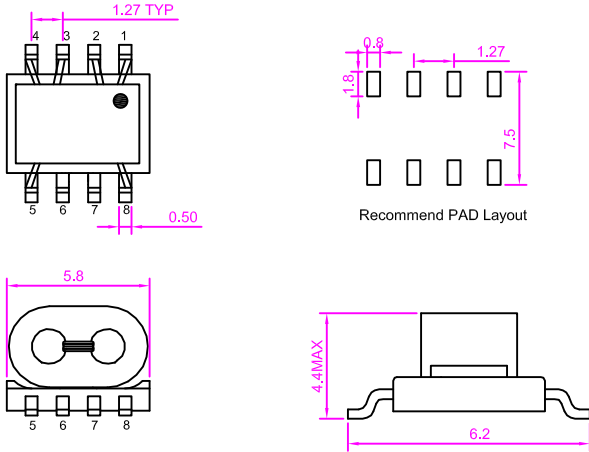







SMT .18



## MECHANICAL

SMT .19



-  High isolation splitters
-  Operating bandwidth:5MHz to 1600MHz
-  Excellent amplitude balance
-  Ideal for cable distribution equipment and set top box applications
-  245°C peak IR reflow temperature rating

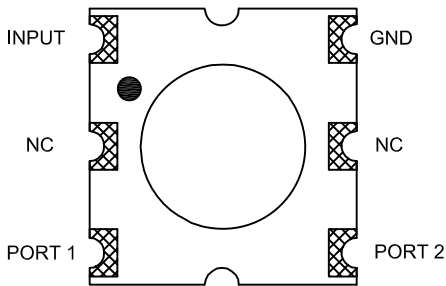


### Electrical Specifications @25°C-Operating Temperature -40°C to+85°C

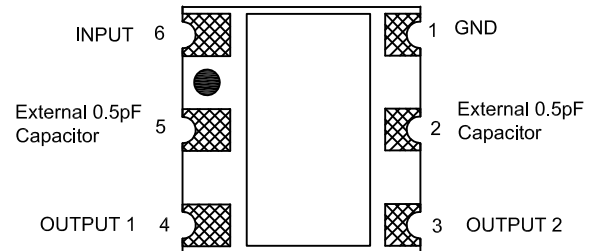
Part Number	System Impedance	Power Split (dB TYP)	Frequency (MHz)	Bandwidth (MHz TYP)			Configuration	SMT Package
				0.6dB	0.8dB	1.5dB		
RFS-001SG	75	3	5-1000	5-600	600-870	871-1000	Config.A	2
RFS-002SG	75	3	5-1000	5-500	501-870	871-1000	Config.A	3
RFS-003SG	75	3	5-1000	5-600	600-870	871-1000	Config.C	4
RFS-004SG	75	3	5-1000	5-600	600-870	871-1000	Config.C	4
RFS-005SG	75	3	5-1600	---	5-1002	1003-1600	Config.B	1
RFS-006SG	50	3	5-1000	1-10	10-325	325-650	Config.A	2
RFS-007SG	75	3	5-2150	5-1002	1003-1600	1600-2150	Config.B	1
RFS-008SG	75	3	5-1000	5-600	600-870	871-1000	Config.C	4
RFS-009SG	50	3	50-800	---	---	---	Config.D	5

## SCHEMATICS

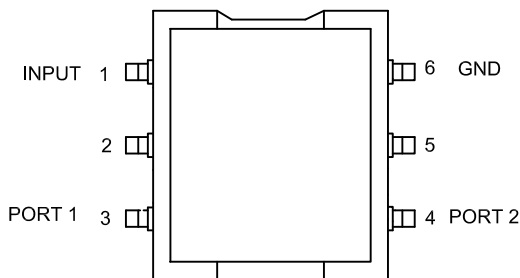
Config. A



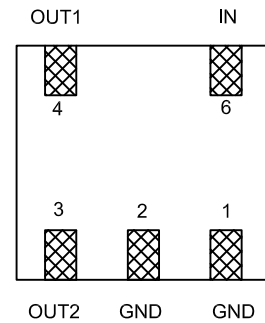
Config. B



Config. C

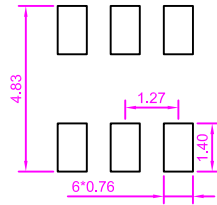
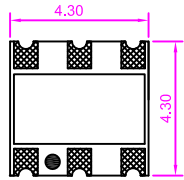


Config. D

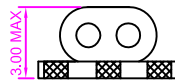
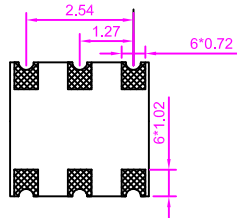


## MECHANICAL

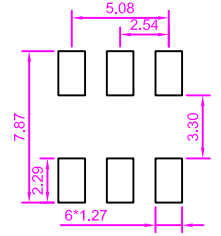
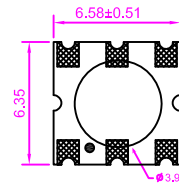
SMT .1



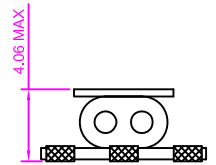
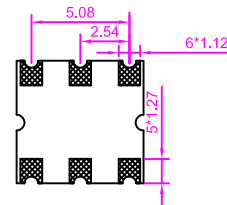
Recommended PAD Layout



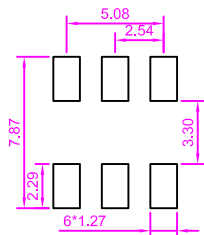
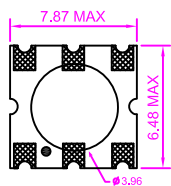
SMT .2



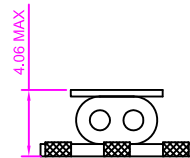
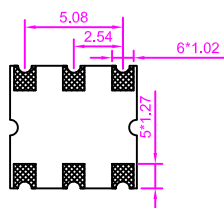
Recommended PAD Layout



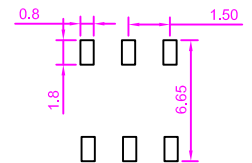
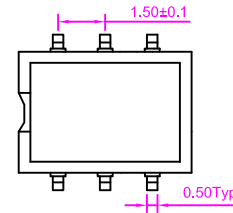
SMT .3



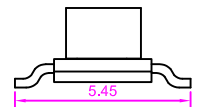
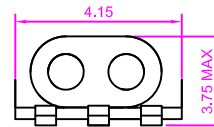
Recommended PAD Layout



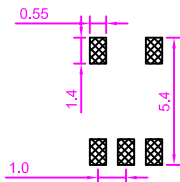
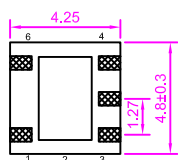
SMT .4



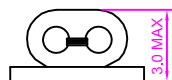
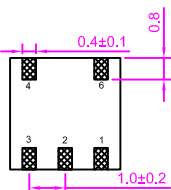
Recommended PAD Layout







SMT .5



Recommended PAD Layout



-  Value-oriented construction
-  Various signal coupling level
-  245°C peak IR reflow temperature rating
-  Low cost

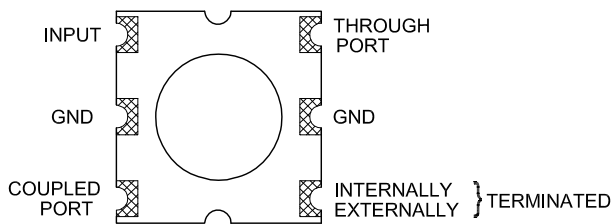


**Electrical Specifications @25°C-Operating Temperature -40°C to+85°C**

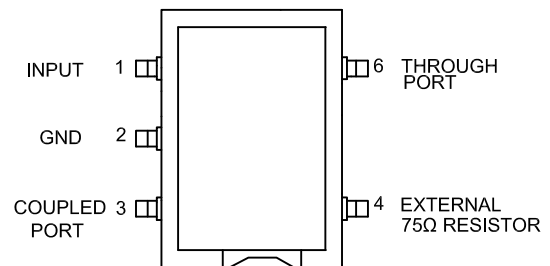
Part Number	System Impedance	Frequency (MHz)	Coupling		Configuration	SMT Package
			Nom (dB)	Flatness (dB MAX)		
RFC-001SG	75	5-900	16.0+0.4/-0.6	±0.6	Config.C	1
RFC-002SG	75	5-1000	19.7±0.5	±0.6	Config.A	2
RFC-003SG	75	5-1000	6.0±0.75	±0.5	Config.A	2
RFC-004SG	75	5-900	7.5±0.5	±0.8	Config.A	2
RFC-005SG	75	5-1000	10.0±0.5	±0.5	Config.A	2
RFC-006SG	75	5-1000	16+0.4/-0.6	±0.6	Config.B	3
RFC-007SG	75	5-1000	16+0.4/-0.6	±0.6	Config.B	4
RFC-008SG	75	5-1000	12.0±0.8	±0.8	Config.B	3
RFC-009SG	75	5-900	19.7±0.5	±0.6	Config.B	3
RFC-010SG	75	5-1000	8.0±0.8	±1.1	Config.B	3
RFC-011SG	75	5-1000	10.0±0.5	±0.5	Config.B	3
RFC-012SG	75	10-1000	14.0Typ	---	Config.D	5
RFC-013SG	75	5-1000	7.0±0.8	±0.8	Config.B	3

## SCHEMATICS

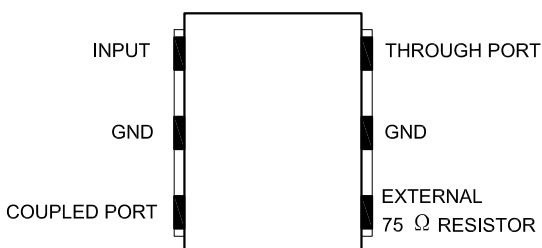
Config. A



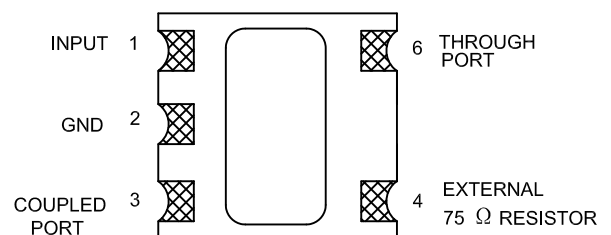
Config. B



Config. C

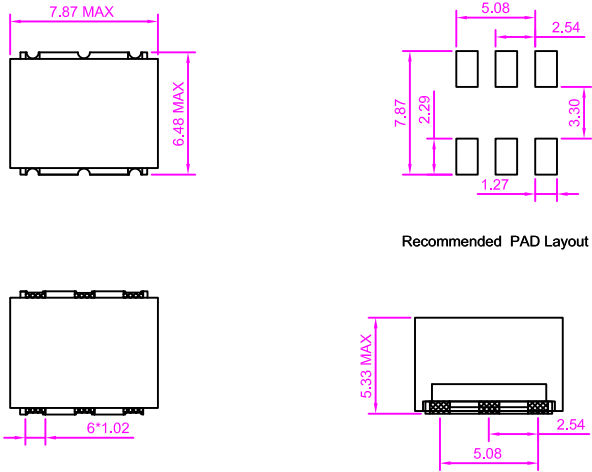


Config. D

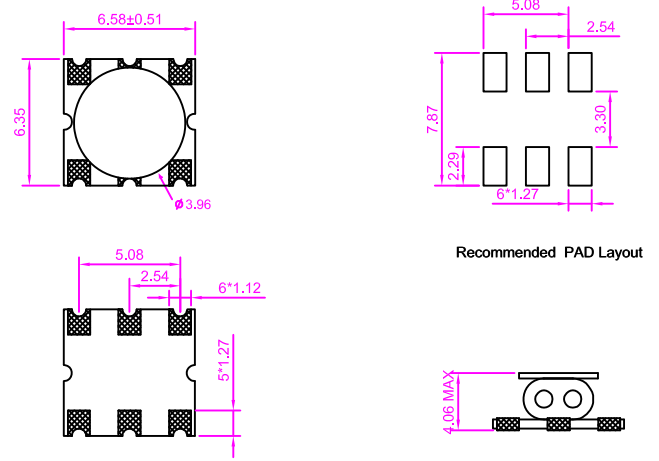


## MECHANICAL

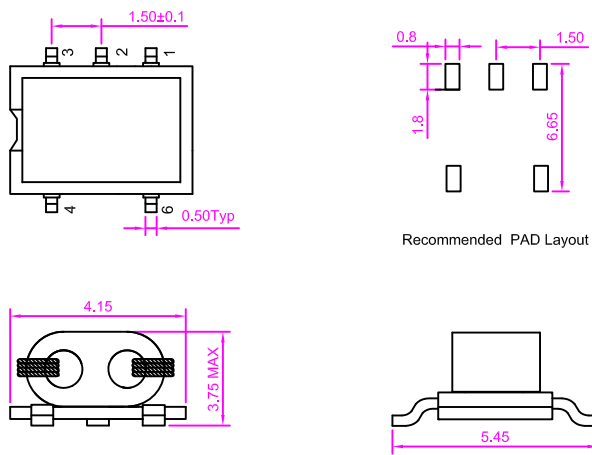
SMT .1



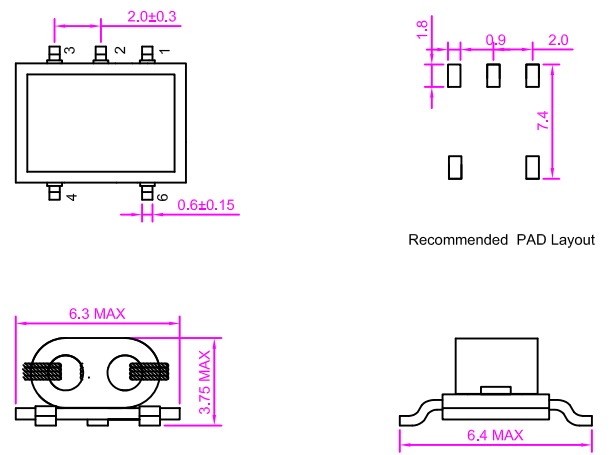
SMT .2



SMT .3



SMT .4



SMT .5

