



FDRM5015D4-1C

ShareLite™ 1695-2200 / 2300-2690 MHz Diplexer, Full DC/AISG Pass, Dual configuration, 4.3-10 Connectors

The Sharelite FDRM Series of diplexers are designed to enable feeder sharing between systems in the 1695-2200 and in the 2300-2690 MHz ranges. RFS's innovative cavity filter design provides a very low insertion loss of 0.15dB typical while keeping the product extremely compact and lightweight. The usage of highly selective filters also guarantees a high isolation level of 50dB between ports, to ensure an interference-free environment for any technology deployed. The filter design also comprises of lightning protection for additional reliability. Designed to withstand the most severe outdoor environments, it also features an IP67 class protection with a vented enclosure to avoid any possible effects of condensation and pressure instability, thus providing a long lasting, extremely reliable solution to any network.

FEATURES / BENEFITS

- Dual unit for use with X-pol Antennas
- Full DC/AISG pass
- 4.3-10 Connectors - Reduce tower loading with connectors that are 40% smaller and lighter than 7-16 DIN connectors
- Extremely Low Insertion Loss
- High level of Rejection between bands - Protection against interference
- Extremely High Power Handling Capability
- Very compact & small size design - Easy installation and reduced tower load
- Exceptional reliability & environmental protection (IP-67)
- Mounting hardware for Wall and Pole mount provided (P/N SEM2-1A)
- Grounding already provided through the mounting bracket



FDRM

Technical features

GENERAL SPECIFICATIONS

Product Type		Diplexer/Cross Band Combiner
Application		GSM1800, LTE1800, UMTS, LTE2100, AWS1, AWS3, AWS4 (U), PCS, LTE2300, LTE2600, WCS, BRS
Configuration		Dual indoor/outdoor

ELECTRICAL SPECIFICATIONS

Branch		1, 2
Frequency Range	MHz	1695-2200 2300-2690
Impedance	Ohms	50, 50
Frequency Band		GSM1800, LTE1800, UMTS, LTE2100, AWS1, AWS3, AWS4 (U), PCS, LTE2300, LTE2600, WCS, BRS
DC Pass		Full DC/AISG Pass
Insertion Loss	dB	0.15 typ./ 0.25 max, 0.15 typ./ 0.25 max
GROUP DELAYS	ns	9 max.
Total Group Delay	ns	9 max.
Return Loss	dB	22 typ. / 19 min, 22 typ. / 19 min
Power Handling Continuous, Max.	W	600 at common port, 300 on each path
Input Power, PEP	W	3000
Rejection between bands	dB	50
3rd Order PIM	dBm (dBc)	-118 (-161) @2x43 typ.

TESTING AND ENVIRONMENTAL

Temperature Range	°C (°F)	-40 to 65 (-40 to 149)
Ingress Protection		IP 67
Environmental		ETSI 300-019-2-4 Class 4.1E
Lightning Protection		EN/IEC61000-4-5 Level 4



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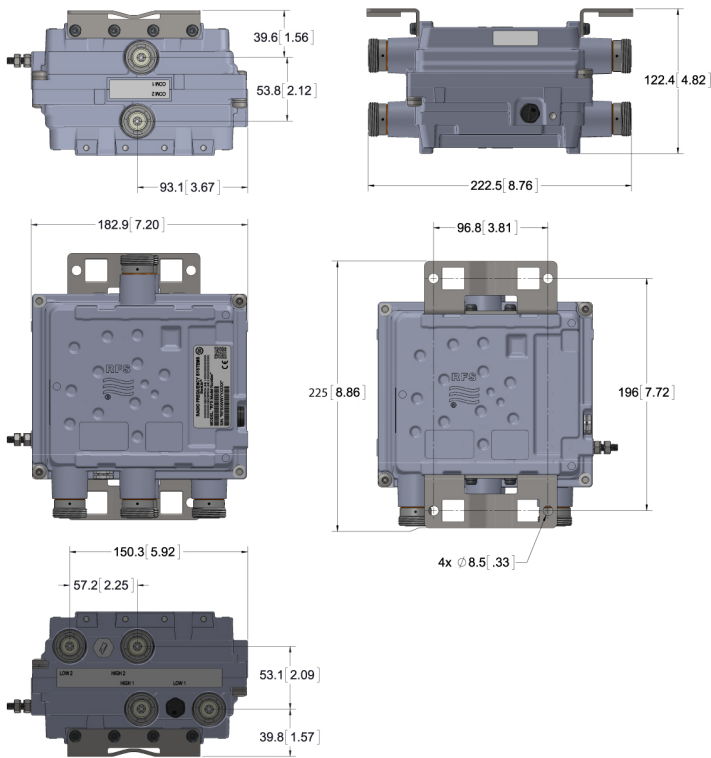
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MECHANICAL SPECIFICATIONS

RF Connectors		4.3-10 Female; 4 ports in, 2 ports out
Shipping Weight	kg (lb)	3.9 (8.6)
Dimensions, H x W x D	mm (in)	156 x 183 x 103 (6.1 x 7.2 x 4.06)
Shipping Dimensions, H x W x D	mm (in)	156 x 183 x 103 (6.1 x 7.2 x 4.06)
Mounting		Wall Mounting: With 4 screws (maximum 6mm diameter) Pole Mounting: With included clamp set 40-110mm (1.57-4.33")

SELECTION TABLE

Type	Model Number	No DC Pass	DC Pass 2300-2690	DC Pass 1695-2200	Full DC Pass	DC Sense priority
Dual	FDRM5015D4-S1					1695-2200
Dual	FDRM5015D4-1C				X	
Dual	FDRM5015D4-2C			X		
Dual	FDRM5015D4-3C		X			
Dual	FDRM5015D4-NC	X				



External Document Links

- [RFS Diplexer Field Test Procedure](#)
- [FTBRM5015D7_Series_Installation_rev0.pdf](#)

Notes