

# S3HD/S3HD-PP

*Designed  
for the  
Digital Drop*



## 3 GHz L-band Satellite Hi-Q Splitters

The BGI Hi-Q Series is the ideal splitter for your Digital two-way plans. Designed for the highest performance in systems utilizing Digital IP integration, cable modem and analog services where the highest isolation and RF performance are required. The Hi-Q design features SMT technology combined with high quality ferrites and blocking capacitors on all ports for long term stability in performance. The SGHDQ Horizontal Series is available in 2, 3, 3B and 4 way horizontal configurations.

## Features & Benefits

- 1KV ring wave surge protected to ensure low inter-modulation performance.
- Minimum -90dBmV spurious and harmonics after 5 surges of 1KV ring wave with a +55dBmV return signal. Custom ultra linear manufactured and controlled ferrites prevent inter-modulation where high level return carriers can affect forward path performance.
- Enhanced return path RL and Isolation performance for compatibility of all 2-way digitally modulated networks.
- Flat 1 GHz bandwidth with minimal insertion loss and reliable RF performance.
- High port to port Isolation providing a resilient 1 GHz Digital network.
- Voltage Blocking capacitors on all ports eliminate core saturation from ground loops and prevent hum modulation.
- Super 360 degree Beryllium copper contacts with 24K gold plating for superior contact stability and center conductors range ( #18 to #23 gauge). An elastomeric gland around the contact ensure longer retention force over a wide range of conductor sizes and insertions. This design allows 10 times more contact surface area.
- SMT PCB component design with Hi-Q components for consistent specifications.
- PCB grounded directly to housing at multiple points for stability and protection.
- SCTE approved ground wire connection for #14-#6 gauge wires.
- SCTE compliant.
- Laminated product label with ports loss clearly indicated, will not fade.

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## 3 GHz L-band Satellite Hi-Q Splitters Specifications

Parameter	Frequency	S3HD2		S3HD3B		S3HD4		S3RD8	
		S3HD2-PP		S3HD3B-PP		S3HD4-PP		S3RD8-PP	
	(MHz)	Typ	QA	Typ	QA	Typ	QA	Typ	QA
Insertion Loss Maximum (dB)	10 - 55	4.2	4.5	6.5	6.7	8.0	8.2	12	13
	55 - 900	4.8	5	6.8	7	8.8	9.0	12	13
	900 - 1750	5.3	5.5	8.8	9	10.5	10.8	14	16
	1750 - 2050	5.3	5.5	9.5	10	11.0	11.5	15	18
	2050 - 2300	5.5	5.7	8.8	9.0	12.0	12.5	15	18
	2300 - 3000	6.8	7.0	9.6	10.0	14.5	14.8	19	21
Return Loss Input Minimum (dB)	10 - 55	14	14	12	11	11	10	11	10
	55 - 900	16	15	12	11	12	11	11	10
	900 - 1750	13	12	12	11	12	11	11	10
	1750 - 2050	12	11	12	11	12	11	11	10
	2050 - 2300	12	11	12	11	12	11	11	10
	2300 - 3000	12	11.0	12	11.0	12.0	11.0	11	10
Return Loss Output Minimum (dB)	10 - 55	12	12	15	14	11	10	11	10
	55 - 900	16	15	12	11	12	11	11	10
	900 - 1750	13	12	12	11	12	11	11	10
	1750 - 2050	12	11	12	11	12	11	11	10
	2050 - 2300	12	11	12	11	12	11	11	10
	2300 - 3000	12.0	11.0	12	11.0	12.0	11.0	11	10
Port/Port Isolation (Output/Output) Minimum (dB)	10 - 55	16	15	21	20	17	16	20	19
	55 - 900	25	24	21	20	18	17	21	20
	900 - 1750	25	24	22	21	18	17	21	20
	1750 - 2050	25	24	18	17	18	17	21	20
	2300 - 3000	17	16	18	17	18	17	16	15
	RFI (dB)	10 - 3000	-130	-120	-130	-120	-130.0	-120	-130.0
Impedance	10 - 3000	75 Ohm							
Power Passing	1000 mA	One Port Power Passing							
		-PP all port Power Passing							
Waterproof test ( Min)	15 PSI								
Operating Temperature	-40 degrees C to +60 degrees C								
Corrosion Resistance	Meets SCTE/ANSI Specification								