# QH-19 3dB 90 Degree Hybrid Couplers





# **Specifications:**

Parameter	Specification	Units	
Frequency Range (Min)	2.0 - 8.0	GHz	
Nominal Coupling	3.0 +.15/-0	dB	
Deviation from Nominal Coupling (Max)	±.40	dB	
Insertion Loss (Max)	0.15	dB	
Isolation (Min)	22	dB	
VSWR (Max)	1.15:1	Ratio	
Phase Balence	±1.0	Degrees	

"A"	"B"	"C"	"D"	"E"	"F"	"G"
in.	in.	in.	in.	in.	in.	in.
3.00	2.00	0.55	1.90	1.80	0.25	-

### **Screening:**

Internal Visual per MIL-STD-883, Method 2017 Temperature Cycle: -65  $^{\circ}$ C to +100  $^{\circ}$ C, 10 cycles

Hermetically-sealed switches are fine and gross leak checked per MIL-STD-883, Method 1014.

Optional High-Rel screening available upon request. Contact the factory to discuss your screening requirements.

## **Environmental Specifications:**

Designed to meet:

MIL-E-5400, MIL-STD-202, MIL-E-16400

Operating Temp: -55°C to +125°C

Storage Temp: -65°C to +150°C

Humidity: MIL-STD-202F, M103, Cond B

Shock: MIL-STD-202F, M213, Cond B

Altitude: MIL-STD-202F, M105, Cond B

Vibration: MIL-STD-202F, M204, Cond B

Thermal Shock: MIL-STD-202F, M107, Cond A

Temperature Cycle: MIL-STD-202F, M105C, Cond D

### **Mechanical Specifications:**

Case Style: QH Outline

Connectors: SMA Female per MIL-C-39012

Connector Control: Micro-D 21 Pin
Bias & Control Pins: Ø0.02" x 0.15" long
Mounting: Ø0.10" through holes

(4) places

# **Custom Options – Contact the Factory**

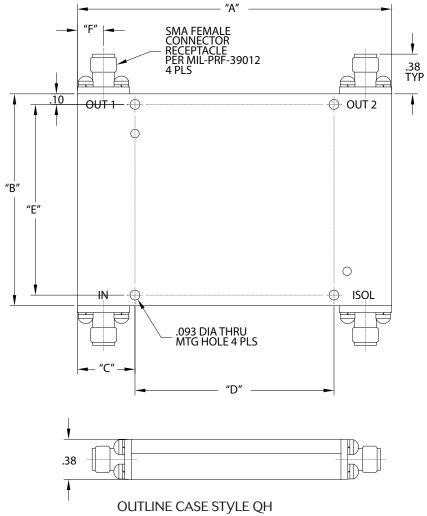
- Gray epoxy paint per MIL-C-22750
- Video transient suppression
- GPO connectors
- ECL logic input
- Phase and amplitude tracking
- Other frequency ranges available from 1MHz to 26GHz
- Reversed logic
- Available without SMA connectors for drop-in applications
- High rel screening



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