

# MH-51

## 3 dB, 180°

### Hybrid Couplers



#### Specifications:

Parameter	Specification	Units
Frequency Range (Min)	–	GHz
Nominal Coupling	3.0 +.45/-0	dB
Deviation from Nominal Coupling (Max)	±.60	dB
Insertion Loss (Max)	0.45	dB
Isolation (Min)	17	dB
VSWR (Max)	1.50:1	Ratio
Phase Balance	±5.0	Degrees

"A" in.	"B" in.	"C" in.	"D" in.	"E" in.	"F" in.	"G" in.
1.00	1.10	0.55	-	0.80	0.25	0.25

#### Screening:

Internal Visual per MIL-STD-883, Method 2017  
 Temperature Cycle: -65 °C to +100 °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.

#### Mechanical Specifications:

Case Style: MH 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

#### 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

#### Custom Options – Contact the Factory

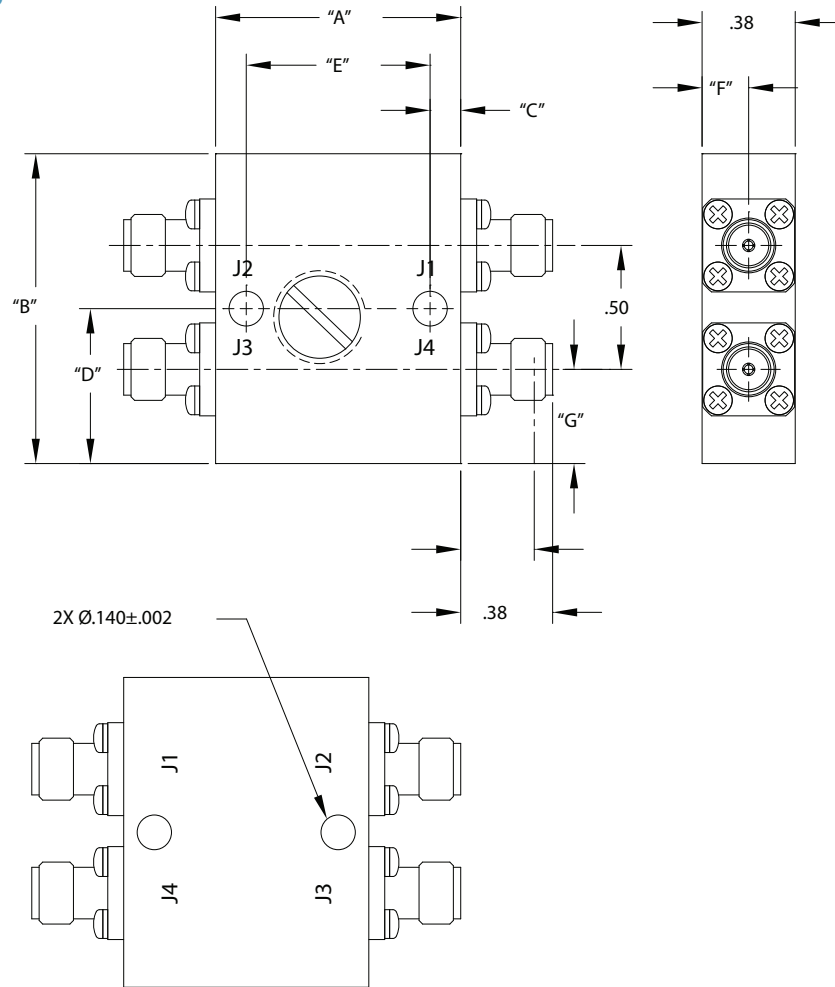
- Gray epoxy paint per MIL-C-22750
- Video transient suppression
- GPO connectors
- ECL logic input
- Phase and amplitude tracking
- Other frequency ranges available from 1 MHz to 26 GHz
- Reversed logic
- Available without SMA connectors for drop-in applications
- High rel screening



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40 Industrial Way East, Eatontown, NJ 07724 [USA]  
 Phone: (732) 460-0212, Fax: (732) 460-0214  
 www.aeroflex.com/ascs • ascs-sales@aeroflex.com

Outline Drawing:



OUTLINE CASE STYLE MH

Aeroflex Signal & Control Solutions  
Aeroflex Microelectronic Solutions  
40 Industrial Way East  
Eatontown, NJ 07724 [USA]  
Fax: (732) 460-0214

ISO 9001:2008 certified

Sales  
Phone: (732) 460-0212  
ASCS-sales@aeroflex.com



[www.aeroflex.com/Microwave](http://www.aeroflex.com/Microwave) [www.aeroflex.com/ASCS](http://www.aeroflex.com/ASCS)

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