

REVISIONS				
EDN	LTR	DESCRIPTION	DATE	APPROVED

**SPECIFICATIONS:**

FREQUENCY RANGE GHz	DC TO 3	3 TO 8	8 TO 12.4	12.4 TO 18
V.S.W.R. MAX	1.2:1	1.3:1	1.4:1	1.5:1
INSERTION LOSS MAX	0.2 dB	0.3 dB	0.4 dB	0.5 dB
ISOLATION MIN	80 dB	70 dB	60 dB	60 dB

POWER MAX. 100 CW  
RF IMPEDANCE 50 OHMS

**ELECTRICAL:**  
VOLTAGE 22 TO 30 VDC  
CURRENT 140 mA MAX @ 28 VDC @ 20°C  
SWITCHING TIME 20 MILLISECONDS MAX.

**MECHANICAL:**  
MATERIAL ALUMINUM (RF ASSY)  
RF CONTACTS BREAK-BEFORE MAKE  
FINISH IRIDIUM PER MIL-C-5541  
PAINT DULL BLACK ENAMEL

**LIFE** 1,000,000 CYCLES MIN.

**ENVIRONMENTAL:**  
TEMP. OPERATING 0°C TO +70°C  
NON-OPERATING -40°C TO +100°C  
HUMIDITY 0 TO 95% NO CONDENSATION

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	<table border="1"> <tr><th colspan="2">UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES</th></tr> <tr><th colspan="2">TOLERANCES</th></tr> <tr><td>DECIMAL</td><td>FRACTIONS</td></tr> <tr><td>PLACES: .111</td><td>: 1/64</td></tr> <tr><td>PLACES: .125</td><td>: 1/32</td></tr> <tr><td>ANGLES: 1/2 DEG.</td><td></td></tr> </table>	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		TOLERANCES		DECIMAL	FRACTIONS	PLACES: .111	: 1/64	PLACES: .125	: 1/32	ANGLES: 1/2 DEG.		<table border="1"> <tr><th colspan="2">MODEL #</th></tr> <tr><td colspan="2">SOC12EMF7A1</td></tr> <tr><td>DRWN</td><td>5/25/95 JJS</td></tr> <tr><td>CHEKED</td><td>5/25/95 B D</td></tr> <tr><td>APPROVED</td><td></td></tr> <tr><td>APPROVED</td><td></td></tr> </table>	MODEL #		SOC12EMF7A1		DRWN	5/25/95 JJS	CHEKED	5/25/95 B D	APPROVED		APPROVED			COAXIAL SWITCH, SMA, SPDT, NO INDICATORS, FAILSAFE
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POWER MAX. 100 CW  
RF IMPEDANCE 50 OHMS

**ELECTRICAL:**  
VOLTAGE 22 TO 30 VDC  
PULSE WIDTH 30 nS MIN; 50 nS MAX  
CURRENT 100 mA MAX @ 28 VDC @ 20°C  
SWITCHING TIME 20 MILLISECONDS MAX.

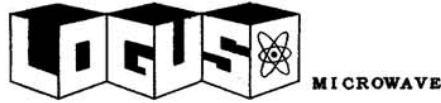
**MECHANICAL:**  
MATERIAL ALUMINUM (RF ASSY)  
RF CONTACTS BREAK-BEFORE MAKE  
FINISH IRIDIUM PER MIL-C-5541  
PAINT DULL BLACK ENAMEL

**LIFE** 1,000,000 CYCLES MIN.

**ENVIRONMENTAL:**  
TEMP. OPERATING 0°C TO +70°C  
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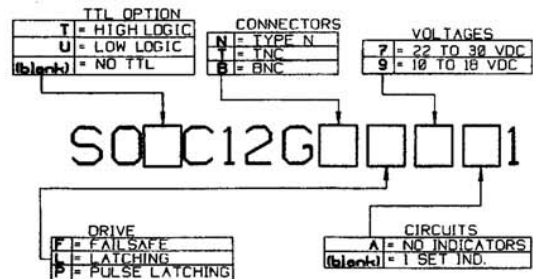
# C12G SERIES

SPDT Relay style DC to 12.4 GHz family.

The C12G series offers reliability and performance in SPDT switching utilizing BNC, N, and TNC connector styles.

This DC to 12.4 GHz series covers typical applications in telecommunications, cellular, mobile radio and ATE.

The following pages comprise a variety of sample models commonly used.



SCHMATIC DIAGRAM SHOWN IN POSITION 1

4 POS 1 } INDICATOR CIRCUITRY  
 5 IND COM }  
 6 POS 2 }

1 VDC } NOMINAL VOLTAGE  
 3 -RETURN }  
 2 POS 2 }  
 1 POS 1 } TTL CONTROL

REVISIONS				
EDN	LTR	DESCRIPTION	DATE	APPROVED

**SPECIFICATIONS:**  
 MICROWAVE

FREQUENCY RANGE GHz	DC TO 3	3 TO 8	8 TO 12.4
V. S. W. R. MAX	1.2:1	1.35:1	1.5:1
INSERTION LOSS MAX	0.2 dB	0.35 dB	0.5 dB
ISOLATION MIN	60 dB	70 dB	60 dB

POWER MAX. 100 MW  
 RF IMPEDANCE 50 OHMS

**ELECTRICAL:**  
 VOLTAGE 22 TO 30 VDC  
 CURRENT 150 mA MAX @ 28 VDC @ 20°C  
 TTL LOGIC VOLTAGE LOW: 0 TO 0.8 VDC  
 VOLTAGE HIGH: 2.4 TO 5.5 VDC  
 CURRENT LOW: 0 mA  
 CURRENT HIGH: 1.75 mA MAX @ 5 V

**SWITCHING TIME** 20 MILLISECONDS MAX.

**MECHANICAL:**  
 MATERIAL ALUMINUM (RF ASSY)  
 BREAK-BEFORE MAKE  
 RF CONTACTS IRIDIUM PER MIL-C-5541  
 FINISH PAINT DULL BLACK ENAMEL  
 LIFE 1,000,000 CYCLES MIN.

**ENVIRONMENTAL:**  
 TEMP. OPERATING 0°C TO +70°C  
 NON-OPERATING -40°C TO +100°C  
 HUMIDITY 0 TO 95% NO CONDENSATION

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES	MODEL #	DATE
DECIMAL FRACTIONS	SOTC12GNL71	7/14/95
PLACES: HIG : 1/64	CHECKED	7/18/95
PLACES: LOW : 1/64	APPROVED	
ANGLES: 1/2 DEG	APPROVED	
MATERIAL:		
NEXT ASSY	USED ON	
APPLICATION	FINISH	

COAXIAL SWITCH, SPOT, TYPE "N"  
 LATCHING, TTL, W/INDICATORS

B 09080 B 9600-10

SCALE UNIT WT. SHEET 1 OF 1

SOTC12GNL71

SOC12GNF7A1

SOC12GNP7A1

SCHEMATIC DIAGRAM SHOWN IN FAILSAFE POSITION 1

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DECIMAL	FRACTIONS	DRWN	7/14/95	LLR	7/19/95	MR	
PLC	± .010	± 1/64	CHECKED	7/19/95	MR		
PLC	± .005	± 1/64	APPROVED				
ANGLES	1/2 DEG.	APPROVED					
MATERIAL							
NEXT ASSY	USED ON	FINISH					
APPLICATION							

COAXIAL SWITCH, SPOT, TYPE "N", FAILSAFE, NO INDICATORS

B	09080	B	9600-1	REV
SCALE	UNIT WT	SHEET 1 OF 1		

SCHEMATIC DIAGRAM SHOWN IN POSITION 1

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MATERIAL							
NEXT ASSY	USED ON	FINISH					
APPLICATION							

COAXIAL SWITCH, SPOT, TYPE "N", PULSE LATCHING, W/INDICATORS

B	09080	B	9600-12	REV
SCALE	UNIT WT	SHEET 1 OF 1		