

50Ω 180° Voltage Variable 18 to 26 MHz

Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Input Power	20 dBm max.
Control Voltage	12V

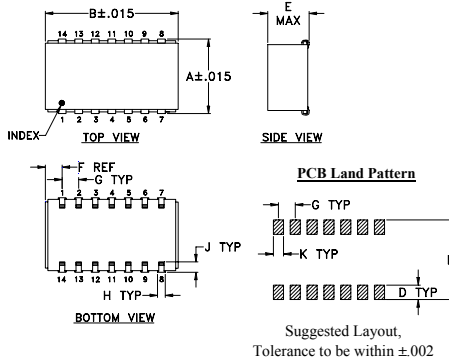
Permanent damage may occur if any of these limits are exceeded.

Pin Connections

IN	1
OUT	7
BIAS	4,6 [^]
GROUND	2,3,5,8,9,10,11,12,13,14

[^] proper operation is achieved with pins 4 or 6 or both connected to BIAS.

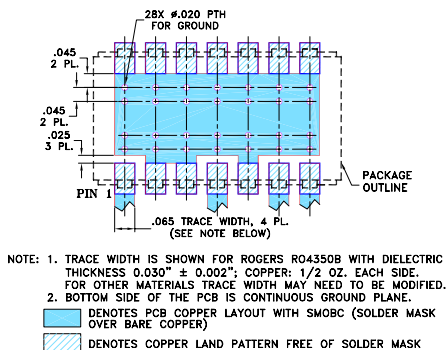
Outline Drawing



Outline Dimensions (inch mm)

A	B	C	D	E	F	G
.450	.803	--	.100	.250	.102	.100
11.43	20.40	--	2.54	6.35	2.59	2.54

H	J	K	L	wt
.047	.065	.065	.470	grams
1.19	1.65	1.65	11.94	3.0

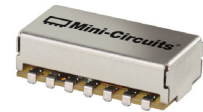
Demo Board MCL P/N: TB-122
Suggested PCB Layout (PL-030)

Features

- low insertion loss, 1.2 dB typ.
- good VSWR, 1.3:1 typ.
- solder-plated J-leads for excellent solderability and strain relief
- aqueous washable

Applications

- IF signal processing



CASE STYLE: BK276

PRICE: \$32.95 ea. QTY (1-9)

Phase Shifter Electrical Specifications

FREQUENCY (MHz)	PHASE RANGE (Degrees)	INSERTION LOSS (dB)	CONTROL VOLTAGE (V)	CONTROL BANDWIDTH (kHz)	VSWR (:1)
	Min.	Typ. Max.		Typ.	Typ. Max.
18-26	180	1.2 3.0	0-12	DC-50	1.2 1.7

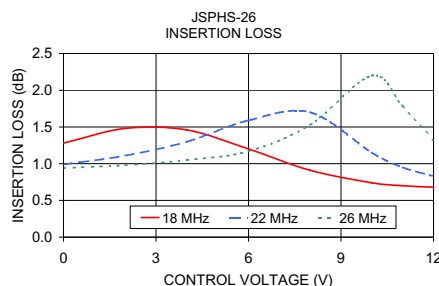
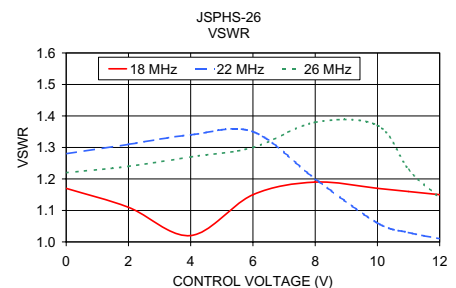
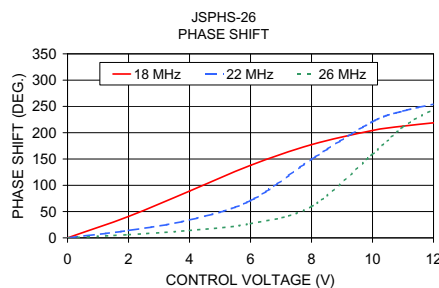
Maximum operating power, 0 dBm

DC input resistance at Control port: 2000 ohms typ.

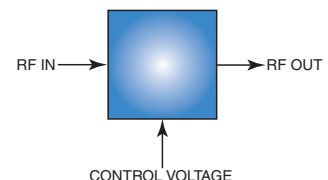
Typical Performance Data

Control Voltage (V)	Phase Shift* (Degrees)			VSWR (:1)			Insertion Loss (dB)		
	18 MHz	22 MHz	26 MHz	18 MHz	22 MHz	26 MHz	18 MHz	22 MHz	26 MHz
0.00	0.00	0.00	0.00	1.17	1.28	1.22	1.28	0.99	0.94
2.00	40.75	14.16	6.22	1.11	1.31	1.24	1.48	1.11	0.98
4.00	89.04	34.13	14.10	1.02	1.34	1.27	1.46	1.30	1.05
6.00	137.90	70.92	27.04	1.15	1.35	1.30	1.20	1.59	1.17
8.00	177.31	149.42	59.86	1.19	1.20	1.38	0.91	1.70	1.53
10.00	204.19	221.13	159.17	1.17	1.06	1.37	0.74	1.15	2.20
11.00	212.53	241.18	210.92	1.16	1.03	1.23	0.70	0.95	1.78
12.00	218.74	254.46	245.15	1.15	1.01	1.14	0.68	0.83	1.32

* Normalized at control voltage = 0V



electrical schematic



Notes

- A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuits' applicable established test performance criteria and measurement instructions.
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