Surface Mount

Slope Equalizer

REQ-75-182+

50Ω 1200 to 1800 MHz

The Big Deal

- Fast attenuation slope for the small frequency span
- Minimal deviation in the attenuation slope
- Surface mount package

CASE STYLE: DV874

Product Overview

REQ-75-182+ is a 50Ω surface mount negative slope equalizer. This model offers excellent performance in the " L band" frequency range of 1200 MHz to 1800 MHz with minimal deviation in the attenuation slope.

Key Features

Feature	Advantages
Fast attenuation slope	Provide fast attenuation slope for the small frequency span can used in satellite system
Minimal deviation	Provide minimal deviation in the attenuation slope
Surface mount package	This surface mount package is very small and it takes small space in the application board.

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Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Input power	+20 dBm

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

Pin Connections

Input	2
Output	10
Ground	1, 3, 4, 5, 7, 8, 9, 11, 12, 13, 15, 16
Not used	6, 14

Features

- Fast attenuation slope
- Negative Slope

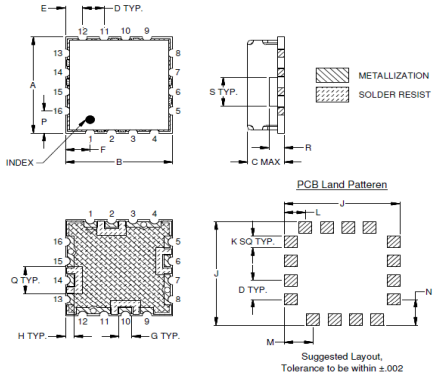
Applications

- L-Band satellite
- Test Equipment
- Lab use

+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

Outline Drawing

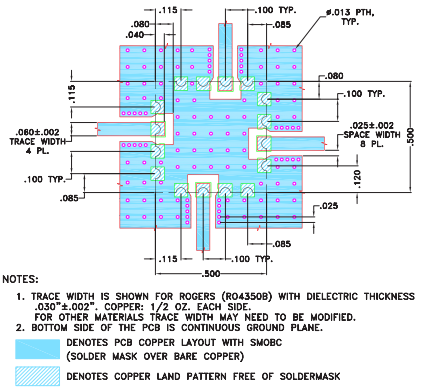


Outline Dimensions (inch / mm)

A	B	C	D	E	F	G	H	J	K
.500	.500	.195	.100	.080	.115	.060	.040	.540	.060
12.7	12.7	4.95	2.54	2.03	2.92	1.52	1.02	13.72	1.52

L	M	N	P	Q	R	S	Wt.
.100	.135	.135	.115	.140	.070	.150	grams
2.54	3.43	3.43	2.92	3.56	1.78	3.81	1.0

Demo Board MCL P/N: TB-686+
Suggested PCB Layout (PL-374)



NOTES:
1. TRACE WIDTH IS SHOWN FOR ROGERS (RO4350B) WITH DIELECTRIC THICKNESS .030"±.002". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)

DENOTES COPPER LAND PATTERN FREE OF SOLDERMASK

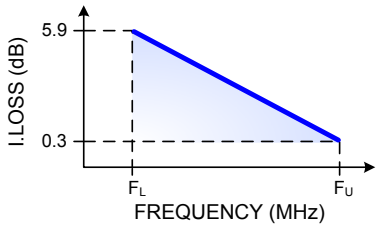
Electrical Specifications at 25°C

Parameter	Condition	Min.	Typ.	Max.	Units
Frequency Range	-	1200		1800	MHz
Insertion Loss	1200 MHz	-	10	-	dB
	1800 MHz	-	2	-	
VSWR	-	-	1.9	-	:1

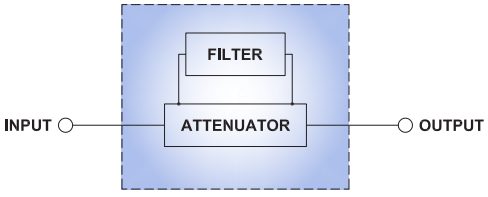
Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
1200.0	10.29	1.84
1250.0	9.49	1.78
1300.0	8.37	1.73
1350.0	7.22	1.66
1400.0	6.18	1.59
1450.0	5.29	1.52
1500.0	4.54	1.45
1525.0	4.21	1.42
1550.0	3.91	1.39
1575.0	3.63	1.36
1600.0	3.38	1.33
1650.0	2.94	1.28
1700.0	2.57	1.24
1750.0	2.25	1.21
1800.0	1.97	1.19

Typical Frequency Response



Simplified Functional 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-Circuit's applicable established test performance criteria and measurement instructions.
C. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp