

FIXED ATTENUATORS

41, 43 Series DC to 60 GHz

Common specifications

Impedance		50 Ω
Power rating (average)		2W at 20°C; 1W at 85°C
Temperature coefficient		0.001 dB/dB/°C
Connectors	V Connector®	Male and female compatible with 2.4 mm
	K Connector®	Male and female, compatible with SMA and 3.5 mm
Material		Passivated stainless steel housing
Size	Length	28.8 mm ±0.5 mm
	Diameter	8 mm
Weight		8g
Temperature range	Operating	-55°C to +85°C
	Nonoperating	-55°C to +125°C

Specifications

	Model ^①	Attenuation (dB)	Attenuation Accuracy				SWR					
			DC-18 GHz	18-26.5 GHz	26.5-40 GHz	40-60 GHz	DC-12 GHz	12-18 GHz	18-26.5 GHz	26.5-40 GHz	40-60 GHz	
Gold Line	DC to 60 GHz											
	41V-3	3	±0.5	±0.6	±0.9	±1.50	1.15	1.20	1.30	1.50	1.90	
	41V-6	6	±0.5	±0.6	±0.9	±1.50	1.15	1.20	1.25	1.40	1.90	
	41V-10	10	±0.5	±0.6	±0.9	±1.50	1.15	1.20	1.25	1.40	1.90	
	41V-20	20	±0.5	±0.6	±0.9	±1.50	1.15	1.20	1.25	1.40	1.90	
	DC to 40 GHz											
	41KC-3	3	±0.4	±0.5	±0.8	-	1.10	1.15	1.23	1.42	-	
	41KC-6	6	±0.4	±0.5	±0.8	-	1.10	1.15	1.18	1.28	-	
	41KC-10	10	±0.4	±0.5	±0.8	-	1.10	1.15	1.18	1.28	-	
	41KC-20	20	±0.4	±0.5	±0.8	-	1.10	1.15	1.18	1.28	-	
	DC to 26.5 GHz											
	41KB-3	3	±0.4	±0.5	-	-	1.10	1.15	1.23	-	-	
41KB-6	6	±0.4	±0.5	-	-	1.10	1.15	1.18	-	-		
41KB-10	10	±0.4	±0.5	-	-	1.10	1.15	1.18	-	-		
41KB-20	20	±0.4	±0.5	-	-	1.10	1.15	1.18	-	-		
Silver Line	DC to 40 GHz											
	43KC-3	3	±0.5	±0.6	±0.9	-	1.15	1.20	1.30	1.50	-	
	43KC-6	6	±0.5	±0.6	±0.9	-	1.15	1.20	1.30	1.40	-	
	43KC-10	10	±0.5	±0.6	±0.9	-	1.15	1.20	1.30	1.40	-	
	43KC-20	20	±0.5	±0.6	±0.9	-	1.15	1.20	1.30	1.40	-	
	DC to 26.5 GHz											
	43KB-3	3	±0.5	±0.6	-	-	1.15	1.20	1.30	-	-	
	43KB-6	6	±0.5	±0.6	-	-	1.15	1.20	1.30	-	-	
	43KB-10	10	±0.5	±0.6	-	-	1.15	1.20	1.30	-	-	
	43KB-20	20	±0.5	±0.6	-	-	1.15	1.20	1.30	-	-	

① For traceability, all Gold Line attenuators are serialized.

② ±1 dB from DC to 26.5 GHz; ±1.3 dB from >26.5 to 40 GHz, including frequency response and DC offset.

Environmental information

Tests are performed per MIL-STD-202F.

Operating Temperature Range	-55°C to +85°
Temperature Shock	-55°C to +150°
Humidity	95% at 40°C, 96 hours, Test 103B, Condition B
Shock	100 G peak sawtooth, method 213, Condition B
Vibration	Sinewave: 10 Hz to 2000 Hz, 0.06" DA, method 204, test condition D Random: 50 Hz to 2000 Hz, 11.6 Grms, Power Spectral Density 0.1 Grms 2 Hz, Method 214, Test Condition 1, Letter D
Salt Spray	5% concentration for 48 hours, Method 101D, Condition B
Voltage withstanding	500 Vac RMS, 60 seconds, method 301

Ordering information

Please specify model/order number, name, and quantity when ordering. Single fixed attenuators may be ordered from the table above.

Model/Order No.	Name
Precision Fixed Attenuator	
41KB-3, 6, 10, or 20	3 dB, 6 dB, 10 dB, 20 dB, DC to 26.5 GHz, 50 Ω, K(m)-K(f)
41KC-3, 6, 10, or 20	3 dB, 6 dB, 10 dB, 20 dB, DC to 40 GHz, 50 Ω, K(m)-K(f)
41V-3, 6, 10, or 20	3 dB, 6 dB, 10 dB, 20 dB, DC to 60 GHz, 50 Ω, V(m)-V(f)
Precision Fixed Attenuator Set	
41KB-S*	41KB Series
41KC-S*	41KC Series
41V-S*	41V Series
Fixed Attenuator	
43KB-3, 6, 10, or 20	3 dB, 6 dB, 10 dB, 20 dB, DC to 26.5 GHz, 50 Ω, K(m)-K(f)
43KC-3, 6, 10, or 20	3 dB, 6 dB, 10 dB, 20 dB, DC to 40 GHz, 50 Ω, K(m)-K(f)
Option	
41K-CAL	Calibration Data for 41K Series Fixed Attenuators
41V-CAL	Calibration Data for 41V Series Fixed Attenuators

* A set of 3, 6, 10, and 20 dB Gold line (Series 41). Attenuators are supplied in a handsome hardwood case. Calibration data are included for each unit.

** Attenuation and SWR test data are provided for input and output ports at 500 MHz frequency intervals.