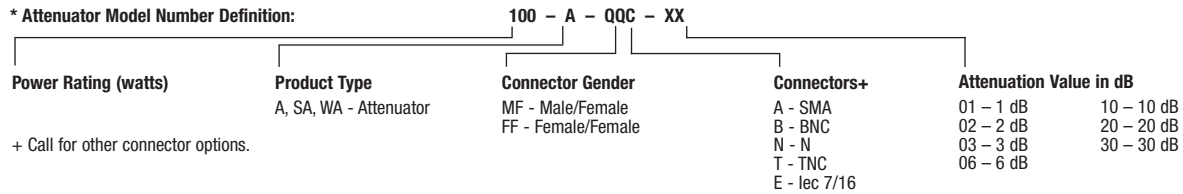


\* Attenuator Model Number Definition:



**0.5-A-MFA SERIES 0.5 WATT BI-DIRECTIONAL**

**Peak Power** 500 mW  
**Connectors** SMA (Male and Female)  
**Frequency Range and VSWR** DC to 2 GHz at 1.10:1 max.,  
 2 GHz to 4 GHz at 1.15:1 max.,  
 4 GHz to 8 GHz at 1.20:1 max.,  
 8 GHz to 12.4 GHz at 1.25:1 max.,  
 12.4 GHz to 18 GHz at 1.35:1  
**Operating Temp. Range** -55°C to +125°C  
**Coolant** Dry (Convection cooled)  
**Finish** Stainless steel  
**Nominal Size** (with N-type connectors): 0.860" L x 0.30" Dia.,  
 (21.9 mm x 7.7 mm) except 0.985" L  
 (25.1 mm) for 30 dB model  
**Weight** 0.2 oz. (5.2 g)

**0.5-A-MFA SERIES, 2-A-MFA & 2-A Thru 25-A**

dB Atten.	Accuracy	±dB DC-18 GHz	"XX" Value
3		0.3 dB	03
6		0.3 dB	06
10		0.5 dB	10
20		0.6 dB	20
30		1.0 dB	30

**ACCURACY 2-A Thru 500-WA SERIES**

dB Atten.	Accuracy ± dB DC-1 GHz	Accuracy ± dB 1-4 GHz	"XX" Value
3	±0.3	0.5	03
6	±0.4	0.6	06
10	±0.4	0.8	10
20	±0.5	1.0	20
30	±0.8	1.3	30



**All Attenuators 100 W or lower (as well as 150-A & 300-A) are Bi-Directional**

Models	2-A-MFA Series (2 WATT)	2-A SERIES (2 WATT)*	3-A-MFB-K1 AND 3-A MFB-XX	5-A (5 WATT)*	5-A-FFI-XX (5 WATT with Interseries Connectors)	10-A-FFI-XX (10 WATT with Interseries Connectors)	10-A (10 WATT)*	25-A (25 WATT)*
Connectors	SMA (Male or Female)	N, BNC, TNC (Male or Female)	BNC (Male or Female)	N, BNC, TNC (Male or Female)	Interchangeable. Use optional 4240 Interseries connector adapter kits, or equivalent.		SMA, N, BNC, TNC (Male or Female)	N, BNC, TNC IEC 7/16
Frequency Range and VSWR	DC to 1 GHz at 1.10:1 max., 1 GHz to 4 GHz at 1.25:1 max.							
Ambient Temp.	-40°C to +40°C							
Finish	Nickel Plated	Silver or Tri-alloy plated, except Nickel plate for BNC				Black anodized. Silver or Tri-alloy plated connectors		
Nominal Size	1.32" L x 0.42" Dia., (33.6 mm x 10.7 mm)	(with N-type connectors): 2.2" L x 0.8" Dia., (55.9 mm x 20.4 mm)	1.4" L x .50 Dia.	(with N-type connectors): 2.2" L x 0.8" Dia., (55.9 mm x 20.4 mm)	1.600" L x 0.79" Dia.	1.600" L x 2.3" Dia.	(with N-type connectors): 2.2" L x 2.3" Dia., (66.1 mm x 58.5 mm)	(with N-type connectors): 5.3" L x 2.3" Dia., (134.7 mm x 58.5 mm)
Weight	0.4 oz. (11.4 g)	3.1 oz. (88 g)	—	3.1 oz. (88 g)	—	6.2 oz. (177 g)	4 oz. (176.7 g)	9 oz. (373.4 g)



Models	50-A (50 WATT)	75-A (75 WATT)	100-A* (100 WATT)	100-SA (100 WATT)	150-A, SA (150 WATT)	300-A, WA*** (300 WATT)	500-WA (500 WATT)**
Connectors	N, BNC, TNC, IEC 7/16						
Frequency Range and VSWR	DC to 1 GHz at 1.10:1 max., 1 GHz to 2.4 GHz at 1.25:1 max.						
Ambient Temperature Range	-40°C to +40°C						
Operating Position	Any	Any	Vertical	Fin Vertical	Vertical	Vertical	Any, except mounting surface up
Finish	Black anodized. Silver or Tri-alloy plated connectors						
Nominal Size (with N-type Connectors)	5.3" L x 2.3" Dia., (134.7 mm x 58.5 mm)	7.3" L x 2.3" Dia., (185.5 mm x 58.5 mm)	6.4" H x 2.6" W x 6.8" D, (162.6 mm x 66 mm x 172.8 mm)	7.30" H x 2.75" W x 2.75" D, (192.8 mm x 69.9 mm x 69.9 mm)	11.9" H x 2.6" W x 6.8" D, (302 mm x 66 mm x 173 mm)	10.9" H x 5.3" W x 6.8" D, (277 mm x 137 mm x 173 mm)	11.31" L x 5.4" W x 4.3" H (285.3 mm x 137.2 mm x 109.3 mm)
Weight	1.0 lb. (0.57 kg)	1.6 lbs. (0.73 kg)	4.3 lbs. (1.95 kg)	2.82 lbs. (1.29 kg)	6.5 lbs. (2.95 kg)	12 lbs. (5.45 kg)	7.9 lbs. (3.6 kg)



\* Also available in -40 dB  
 \*\* 4 Mounting Holes, Centers and Size: 1.812" x 7.687", typical 10-32 thread x 0.5" D  
 \*\*\* WA SERIES Compact Size



### 600-A-QFFN-XX (600 WATT UNI-DIRECTIONAL) (See table p. 30)

<b>Connectors</b>	QC N-type Female
<b>Frequency Range and VSWR</b>	DC to 1 GHz at 1.10:1 max., 1 GHz to 2.4 GHz at 1.25:1 max.
<b>Operating Position</b>	Vertical
<b>Coolant</b>	Dry (Convection cooled)
<b>Finish</b>	Black anodized. Silver or Tri-alloy plated connectors
<b>Nominal Size</b>	13.15" L x 9.65" W x 8.875" H
<b>Weight</b>	21.5 lbs. (9.75 kg)
<b>Accessories</b>	Quick disconnect options (page 41)



### 1000-WA-QQC-XX SERIES (1000 WATT) (See p. 30 for QQC #)

<b>Connectors</b>	N, TNC, or IEC 7/16
<b>Coolant</b>	Dry (Convection cooled)
<b>Operating Position</b>	Any, except mounting surface up
<b>Frequency Range and VSWR</b>	DC to 1 GHz at 1.10:1 max., 1 GHz to 2.4 GHz at 1.25:1 max.
<b>Attenuator Operation</b>	Unidirectional. Standard attenuation values 3, 6, 10, 20 and 30 dB; others available on request
<b>Finish</b>	Black anodized. Silver or Tri-alloy plated connectors (with female N connector; excludes removable feet), 18.65" L x 10.53" W x 4.9" H (587.6 mm x 229.4 mm x 137.2 mm)
<b>Nominal Size</b>	1.885" x 14.40", typical 1/4-20 thread x 0.5" D
<b>4 Mounting Holes, Centers and Size</b>	
<b>Weight</b>	Approximately 26.5 lbs. (12.1 kg)

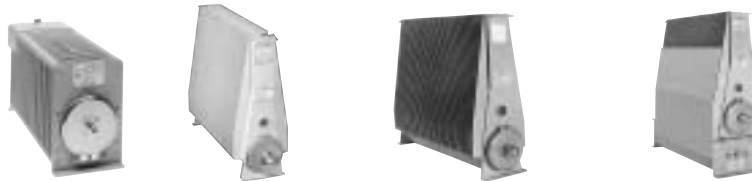


#### XX VALUE

dB Atten.	Accuracy ± dB DC-1 GHz	Accuracy ± dB 1-2.4 GHz	"XX" Value
3	0.3	0.5	03
6	0.4	0.6	06
10	0.4	0.8	10
20	0.5	1.0	20
30	0.8	1.3	30

#### ACCURACY 1000-WA

dB Atten.	Accuracy ± dB DC-1 GHz	Accuracy ± dB 1-2.4 GHz	"XX" Value
3	0.5	+1.0 dB/-0.5 dB	03
6	0.6	+1.2 dB/-0.5 dB	06
10	0.6	+1.5 dB/-0.5 dB	10
20	0.6	+1.5 dB/-0.5 dB	20
30	1.0	+1.5 dB/-0.5 dB	30



Models	8325 (500 WATT)	8327-300 (1 kW)	8329-300 (2 kW)	8329-300 with BA-300-115 (4 kW)	8329-300 with BA-300-230 (4 kW)
<b>Power Rating</b>	500 W continuous	1000 W continuous	2000 W continuous	4000 W continuous with blower on, 1000 W with blower off	
<b>Frequency Range and VSWR</b>	Input 1.1 max. DC to 500 MHz				
<b>Attenuation</b>	30 dB				
<b>Accuracy Ambient</b>	±0.5 dB (Calibration Data supplied for 30, 100, 200, 300, 400, and 500 MHz which is accurate to ±0.2 dB)				
<b>Temperature Range</b>	-40°C to +45°C				
<b>Connectors</b>	QC type N(F)	QC type LC(F) input, N(F) output			
<b>Coolant</b>	0.9 gal. (3.4 liters) refined mineral oil	2.9 gal. (11 liters) refined mineral oil	2.9 gal. (11 liters) silicone oil	2.9 gal. (11 liters) silicone oil with forced-air cooling	
<b>Operating Position</b>	Horizontal only				
<b>Finish</b>	Gray powder coat				
<b>Nominal Size</b>	17 1/2" L x 5 15/16" W, x 8 1/2" H (445 mm x 151 mm x 216 mm)	23 15/16" L x 7 1/8" W x 17 3/16" H, (596 mm x 181 mm x 437 mm)		23 15/32" L x 7 1/8" W x 22 1/16" H, 596 mm x 181 mm x 560 mm)	
<b>Weight Note</b>	25 lbs. (11 kg)	57 lbs. (26 kg)		70 1/2 lbs. (32 kg)	
	—	Overload thermoswitch P/N 8329-028 is optional		Overload thermoswitch P/N 8329-028 is optional. When ordered as a package, attenuator and blower are factory assembled at no additional charge.	

