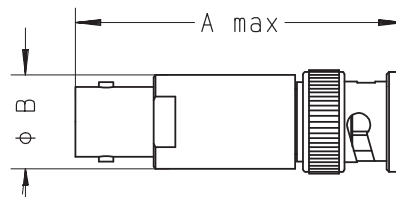


### 1 WATT, STANDARD TYPE

Part Number	Frequency range (GHz)	ATTENUATION (dB)			V.S.W.R.		Power (W)
		Nominal	DEVIATION		DC - 2	2 - 3	peak
			DC - 2	2 - 3			
R412 400 124	DC - 3	0	+ 0,3	+ 0,5	≤ 1,20	≤ 1,30	100
R412 401 124		1	± 0,3	± 0,5	≤ 1,20	≤ 1,30	100
R412 402 124		2	± 0,3	± 0,5	≤ 1,20	≤ 1,30	100
R412 403 124		3	± 0,3	± 0,5	≤ 1,20	≤ 1,30	100
R412 404 124		4	± 0,3	± 0,5	≤ 1,20	≤ 1,30	100
R412 405 124		5	± 0,3	± 0,5	≤ 1,20	≤ 1,30	100
R412 406 124		6	± 0,3	± 0,5	≤ 1,20	≤ 1,30	100
R412 407 124		7	± 0,5	± 0,5	≤ 1,20	≤ 1,30	100
R412 408 124		8	± 0,5	± 0,5	≤ 1,20	≤ 1,30	100
R412 409 124		9	± 0,5	± 0,5	≤ 1,20	≤ 1,30	100
R412 410 124		10	± 0,5	± 0,5	≤ 1,20	≤ 1,30	100
R412 411 124		11	± 0,5	± 0,5	≤ 1,20	≤ 1,30	100
R412 412 124		12	± 0,5	± 0,5	≤ 1,20	≤ 1,30	100
R412 413 124		13	± 0,5	± 0,5	≤ 1,20	≤ 1,30	100
R412 414 124		14	± 0,5	± 0,5	≤ 1,20	≤ 1,30	100
R412 415 124		15	± 0,5	± 0,5	≤ 1,20	≤ 1,30	100
R412 416 124		16	± 0,7	± 0,7	≤ 1,20	≤ 1,30	100
R412 417 124		17	± 0,7	± 0,7	≤ 1,20	≤ 1,30	100
R412 418 124		18	± 1,0	± 1,0	≤ 1,20	≤ 1,30	100
R412 419 124		19	± 1,0	± 1,0	≤ 1,20	≤ 1,30	100
R412 420 124		20	± 1,0	± 1,0	≤ 1,20	≤ 1,30	100



A inch (mm)	B inch (mm)	Weight (g)
1.26" (32)	.51" (13)	17



**Australian Representatives**

**ROJONE, PTY LTD.**

Tel: 02 9829 1555

E: sales@rojone.com.au

www.rojone.com.au

### 2 WATTS

Part Number	Frequency range (GHz)	ATTENUATION (dB)		V.S.W.R.	Power (W)	Fig.
		Nominal	DEVIATION			
			DC - 2	DC - 2	peak	
R412 400 000	DC - 2	0	+ 0,35	≤ 1,20	100	1
R412 401 000		1	± 0,35	≤ 1,20	100	1
R412 402 000		2	± 0,35	≤ 1,20	100	1
R412 403 000		3	± 0,35	≤ 1,20	100	1
R412 404 000		4	± 0,35	≤ 1,20	100	1
R412 405 000		5	± 0,35	≤ 1,20	100	1
R412 406 000		6	± 0,35	≤ 1,20	100	1
R412 407 000		7	± 0,35	≤ 1,20	100	1
R412 408 000		8	± 0,35	≤ 1,20	100	1
R412 409 000		9	± 0,35	≤ 1,20	100	1
R412 410 000		10	± 0,35	≤ 1,20	100	1
R412 411 000		11	± 0,35	≤ 1,20	100	1
R412 412 000		12	± 0,35	≤ 1,20	100	1
R412 413 000		13	± 0,35	≤ 1,20	100	1
R412 414 000		14	± 0,35	≤ 1,20	100	1
R412 415 000		15	± 0,40	≤ 1,20	100	1
R412 416 000		16	± 0,40	≤ 1,20	100	1
R412 417 000		17	± 0,40	≤ 1,20	100	1
R412 418 000		18	± 0,40	≤ 1,20	100	1
R412 419 000		19	± 0,40	≤ 1,20	100	1
R412 420 000		20	± 0,45	≤ 1,20	100	1
R412 430 000		30	± 0,80	≤ 1,20	100	2
R412 440 000		40	± 0,80	≤ 1,20	100	2
R412 450 000		50	± 1,00	≤ 1,25	100	2

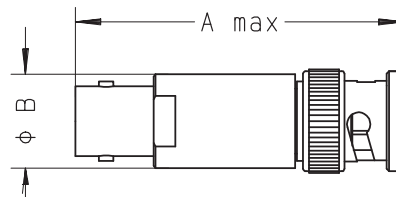


Figure	A inch (mm)	B inch (mm)	Weight (g)
1	1.83" (46.5)	.51" (13)	30
2	2.25" (57.1)		40

### 2 WATTS

Part Number	Frequency range (GHz)	ATTENUATION (dB)			V.S.W.R.		Power (W)	Fig.
		Nom.	DEVIATION		DC - 4	4 - 8		
			DC - 4	4 - 8			peak	
R414 400 000	DC - 8	0	+ 0.30	+ 0.50	≤ 1.20	≤ 1.25	100	1
R414 401 000		1	± 0.30	± 0.50	≤ 1.20	≤ 1.25	100	1
R414 402 000		2	± 0.30	± 0.50	≤ 1.20	≤ 1.25	100	1
R414 403 000		3	± 0.30	± 0.50	≤ 1.20	≤ 1.25	100	1
R414 404 000		4	± 0.30	± 0.50	≤ 1.20	≤ 1.25	100	1
R414 405 000		5	± 0.30	± 0.50	≤ 1.20	≤ 1.25	100	1
R414 406 000		6	± 0.30	± 0.50	≤ 1.20	≤ 1.25	100	1
R414 407 000		7	± 0.30	± 0.50	≤ 1.20	≤ 1.25	100	1
R414 408 000		8	± 0.30	± 0.50	≤ 1.20	≤ 1.25	100	1
R414 409 000		9	± 0.30	± 0.50	≤ 1.20	≤ 1.25	100	1
R414 410 000		10	± 0.30	± 0.50	≤ 1.20	≤ 1.25	100	1
R414 411 000		11	± 0.30	± 0.50	≤ 1.20	≤ 1.25	100	1
R414 412 000		12	± 0.30	± 0.50	≤ 1.20	≤ 1.25	100	1
R414 413 000		13	± 0.30	± 0.50	≤ 1.20	≤ 1.25	100	1
R414 414 000		14	± 0.30	± 0.50	≤ 1.20	≤ 1.25	100	1
R414 415 000		15	± 0.50	± 0.50	≤ 1.20	≤ 1.25	100	1
R414 420 000		20	± 0.50	± 0.50	≤ 1.20	≤ 1.25	100	1
R414 425 000		25	± 0.50	± 0.50	≤ 1.20	≤ 1.25	100	2
R414 430 000		30	± 0.80	± 0.80	≤ 1.20	≤ 1.25	100	2
R414 440 000		40	± 0.80	± 0.80	≤ 1.20	≤ 1.25	100	2
R414 450 000		50	± 1.00	± 1.00	≤ 1.20	≤ 1.25	100	2
R414 460 000		60	± 1.00	± 1.00	≤ 1.20	≤ 1.25	100	2

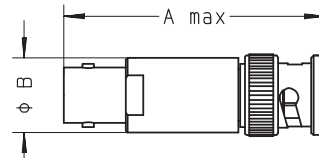
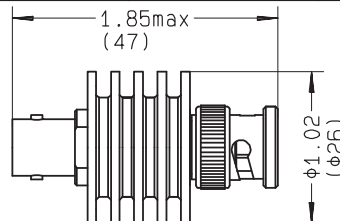


Figure	A inch (mm)	B inch (mm)	Weight (g)
1	1.83" (46.5)	.51" (13)	30
2	2.25" (57.1)		40

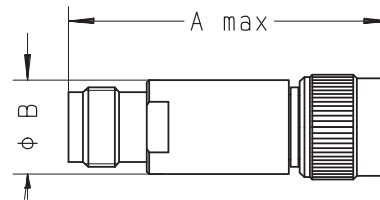
### 10 to 15 WATTS MEDIUM POWER

Part Number	Frequency range (GHz)	ATTENUATION (dB)		V.S.W.R.	Power (W)		Weight (Max) (g)
		Nominal	DEVIATION		avg.	peak	
			DC - 4				
R415 403 000	DC - 4	3	± 0.50	≤ 1.30	15	250	70
R415 406 000		6	± 0.50	≤ 1.30	12	250	70
R415 410 000		10	± 0.50	≤ 1.30	10	250	70
R415 420 000		20	± 0.50	≤ 1.30	10	250	70



### 1 WATT, STANDARD TYPE

Part Number	Frequency range (GHz)	ATTENUATION (dB)			V.S.W.R.		Power (W) peak
		Nom.	DEVIATION		DC - 2	2 - 3	
			DC - 2	2 - 3			
R412 500 124	DC - 3	0	+ 0,3	+ 0,5	≤ 1,20	≤ 1,30	100
R412 501 124		1	± 0,3	± 0,5	≤ 1,20	≤ 1,30	100
R412 502 124		2	± 0,3	± 0,5	≤ 1,20	≤ 1,30	100
R412 503 124		3	± 0,3	± 0,5	≤ 1,20	≤ 1,30	100
R412 504 124		4	± 0,3	± 0,5	≤ 1,20	≤ 1,30	100
R412 505 124		5	± 0,3	± 0,5	≤ 1,20	≤ 1,30	100
R412 506 124		6	± 0,3	± 0,5	≤ 1,20	≤ 1,30	100
R412 507 124		7	± 0,5	± 0,5	≤ 1,20	≤ 1,30	100
R412 508 124		8	± 0,5	± 0,5	≤ 1,20	≤ 1,30	100
R412 509 124		9	± 0,5	± 0,5	≤ 1,20	≤ 1,30	100
R412 510 124		10	± 0,5	± 0,5	≤ 1,20	≤ 1,30	100
R412 511 124		11	± 0,5	± 0,5	≤ 1,20	≤ 1,30	100
R412 512 124		12	± 0,5	± 0,5	≤ 1,20	≤ 1,30	100
R412 513 124		13	± 0,5	± 0,5	≤ 1,20	≤ 1,30	100
R412 514 124		14	± 0,5	± 0,5	≤ 1,20	≤ 1,30	100
R412 515 124		15	± 0,5	± 0,5	≤ 1,20	≤ 1,30	100
R412 516 124		16	± 0,7	± 0,7	≤ 1,20	≤ 1,30	100
R412 517 124		17	± 0,7	± 0,7	≤ 1,20	≤ 1,30	100
R412 518 124		18	± 1,0	± 1,0	≤ 1,20	≤ 1,30	100
R412 519 124		19	± 1,0	± 1,0	≤ 1,20	≤ 1,30	100
R412 520 124		20	± 1,0	± 1,0	≤ 1,20	≤ 1,30	100



A inch (mm)	B inch (mm)	Weight (g)
1.26" (32)	.51" (13)	17

### 2 WATTS, HIGH PERFORMANCE

Part Number	Frequency range (GHz)	ATTENUATION (dB)		V.S.W.R.	Power (W)	Fig.
		Nom.	DEVIATION			
			DC - 2	DC - 2		
R412 500 000	DC - 2	0	+ 0,35	≤ 1,15	100	1
R412 501 000		1	± 0,35	≤ 1,15	100	1
R412 502 000		2	± 0,35	≤ 1,15	100	1
R412 503 000		3	± 0,35	≤ 1,15	100	1
R412 504 000		4	± 0,35	≤ 1,15	100	1
R412 505 000		5	± 0,35	≤ 1,15	100	1
R412 506 000		6	± 0,35	≤ 1,15	100	1
R412 507 000		7	± 0,35	≤ 1,15	100	1
R412 508 000		8	± 0,35	≤ 1,15	100	1
R412 509 000		9	± 0,35	≤ 1,15	100	1
R412 510 000		10	± 0,35	≤ 1,15	100	1
R412 511 000		11	± 0,35	≤ 1,15	100	1
R412 512 000		12	± 0,35	≤ 1,15	100	1
R412 513 000		13	± 0,35	≤ 1,15	100	1
R412 514 000		14	± 0,35	≤ 1,15	100	1
R412 515 000		15	± 0,35	≤ 1,15	100	1
R412 520 000		20	± 0,45	≤ 1,15	100	1
R412 530 000		30	± 0,80	≤ 1,15	100	2
R412 540 000		40	± 0,80	≤ 1,15	100	2
R412 550 000		50	± 1,00	≤ 1,15	100	2

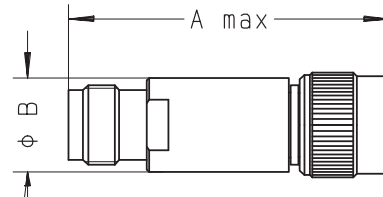


Figure	A inch (mm)	B inch (mm)	Weight (g)
1	1.79" (45.5)	.51" (13)	30
2	2.21" (56.1)		40

### 2 WATTS, STANDARD TYPE

Part Number	Frequency range (GHz)	ATTENUATION (dB)				V.S.W.R.			Power (W) peak	Fig.
		Nom.	DEVIATION			DC - 4	4 - 8	8 - 12.4		
			DC - 4	4 - 8	8 - 12.4					
R414 500 000	DC - 12.4	0	+ 0.30	+ 0.50	+ 0.70	≤ 1.20	≤ 1.25	≤ 1.30	100	1
R414 501 000		1	± 0.30	± 0.50	± 0.70	≤ 1.20	≤ 1.25	≤ 1.30	100	1
R414 502 000		2	± 0.30	± 0.50	± 0.70	≤ 1.20	≤ 1.25	≤ 1.30	100	1
R414 503 000		3	± 0.30	± 0.50	± 0.70	≤ 1.20	≤ 1.25	≤ 1.30	100	1
R414 504 000		4	± 0.30	± 0.50	± 0.70	≤ 1.20	≤ 1.25	≤ 1.30	100	1
R414 505 000		5	± 0.30	± 0.50	± 0.70	≤ 1.20	≤ 1.25	≤ 1.30	100	1
R414 506 000		6	± 0.30	± 0.50	± 0.70	≤ 1.20	≤ 1.25	≤ 1.30	100	1
R414 507 000		7	± 0.30	± 0.50	± 0.70	≤ 1.20	≤ 1.25	≤ 1.30	100	1
R414 508 000		8	± 0.30	± 0.50	± 0.70	≤ 1.20	≤ 1.25	≤ 1.30	100	1
R414 509 000		9	± 0.30	± 0.50	± 0.70	≤ 1.20	≤ 1.25	≤ 1.30	100	1
R414 510 000		10	± 0.30	± 0.50	± 0.70	≤ 1.20	≤ 1.25	≤ 1.30	100	1
R414 511 000		11	± 0.30	± 0.50	± 0.70	≤ 1.20	≤ 1.25	≤ 1.30	100	1
R414 512 000		12	± 0.30	± 0.50	± 0.70	≤ 1.20	≤ 1.25	≤ 1.30	100	1
R414 513 000		13	± 0.30	± 0.50	± 0.70	≤ 1.20	≤ 1.25	≤ 1.30	100	1
R414 514 000		14	± 0.30	± 0.50	± 0.70	≤ 1.20	≤ 1.25	≤ 1.30	100	1
R414 515 000		15	± 0.50	± 0.50	± 0.70	≤ 1.20	≤ 1.25	≤ 1.30	100	1
R414 520 000		20	± 0.50	± 0.50	± 0.70	≤ 1.20	≤ 1.25	≤ 1.30	100	1
R414 525 000		25	± 0.80	± 0.80	± 1.20	≤ 1.20	≤ 1.25	≤ 1.30	100	2
R414 530 000		30	± 0.80	± 0.80	± 1.20	≤ 1.20	≤ 1.25	≤ 1.30	100	2
R414 540 000		40	± 0.80	± 0.80	± 1.30	≤ 1.20	≤ 1.25	≤ 1.30	100	2
R414 550 000		50	± 1.00	± 1.20	± 1.50	≤ 1.20	≤ 1.25	≤ 1.30	100	2
R414 560 000		60	± 1.20	± 1.20	± 1.20	≤ 1.20	≤ 1.25	≤ 1.30	100	2

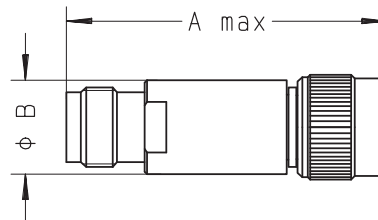
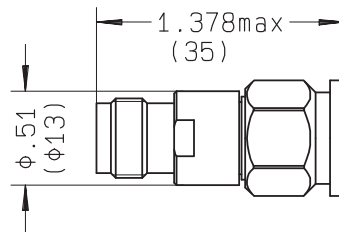


Figure	A inch (mm)	B inch (mm)	Weight (g)
1	1.79" (45.5)	.51"(13)	30
2	2.21" (56.1)		40

### 2 WATTS, HIGH PERFORMANCE TYPE

Part Number	Frequency range (GHz)	ATTENUATION (dB)		V.S.W.R.				Power (W) peak	Weight (Max) (g)
		Nom.	DEVIATION	DC - 4	4 - 8	8 - 12.4	12.4 - 18		
								DC - 18	
R414 500 161	DC - 18	0	+ 0.40	≤ 1.15	≤ 1.20	≤ 1.25	≤ 1.35	100	30
R414 501 161		1	± 0.40	≤ 1.15	≤ 1.20	≤ 1.25	≤ 1.35	100	30
R414 502 161		2	± 0.40	≤ 1.15	≤ 1.20	≤ 1.25	≤ 1.35	100	30
R414 503 161		3	± 0.40	≤ 1.15	≤ 1.20	≤ 1.25	≤ 1.35	100	30
R414 504 161		4	± 0.40	≤ 1.15	≤ 1.20	≤ 1.25	≤ 1.35	100	30
R414 505 161		5	± 0.40	≤ 1.15	≤ 1.20	≤ 1.25	≤ 1.35	100	30
R414 506 161		6	± 0.40	≤ 1.15	≤ 1.20	≤ 1.25	≤ 1.35	100	30
R414 507 161		7	± 0.50	≤ 1.15	≤ 1.20	≤ 1.25	≤ 1.35	100	30
R414 508 161		8	± 0.50	≤ 1.15	≤ 1.20	≤ 1.25	≤ 1.35	100	30
R414 509 161		9	± 0.50	≤ 1.15	≤ 1.20	≤ 1.25	≤ 1.35	100	30
R414 510 161		10	± 0.50	≤ 1.15	≤ 1.20	≤ 1.25	≤ 1.35	100	30
R414 511 161		11	± 0.50	≤ 1.15	≤ 1.20	≤ 1.25	≤ 1.35	100	30
R414 512 161		12	± 0.50	≤ 1.15	≤ 1.20	≤ 1.25	≤ 1.35	100	30
R414 513 161		13	± 0.50	≤ 1.15	≤ 1.20	≤ 1.25	≤ 1.35	100	30
R414 514 161		14	± 0.50	≤ 1.15	≤ 1.20	≤ 1.25	≤ 1.35	100	30
R414 515 161		15	± 0.50	≤ 1.15	≤ 1.20	≤ 1.25	≤ 1.35	100	30
R414 516 161		16	± 0.60	≤ 1.15	≤ 1.20	≤ 1.25	≤ 1.35	100	30
R414 517 161		17	± 0.60	≤ 1.15	≤ 1.20	≤ 1.25	≤ 1.35	100	30
R414 518 161		18	± 0.60	≤ 1.15	≤ 1.20	≤ 1.25	≤ 1.35	100	30
R414 519 161		19	± 0.60	≤ 1.15	≤ 1.20	≤ 1.25	≤ 1.35	100	30
R414 520 161		20	± 0.60	≤ 1.15	≤ 1.20	≤ 1.25	≤ 1.35	100	30



### 10 to 15 WATTS MEDIUM POWER

Part Number	Frequency range (GHz)	ATTENUATION (dB)			V.S.W.R.			Power (W)		Fig.
		Nominal	DEVIATION		DC - 4	4 - 8	8 - 18	avg.	peak	
			DC - 8	DC - 18						
R415 503 000	DC - 8	3	± 0.30		≤ 1.15	≤ 1.25		15	250	1
R415 506 000		6	± 0.30		≤ 1.15	≤ 1.25		12	250	1
R415 510 000		10	± 0.30		≤ 1.15	≤ 1.25		10	250	1
R415 520 000		20	± 0.50		≤ 1.15	≤ 1.25		10	250	1
R416 803 000	DC - 18	3		± 0.50	≤ 1.20	≤ 1.30	≤ 1.40	15	250	2
R416 806 000		6		± 0.50	≤ 1.20	≤ 1.30	≤ 1.40	12	250	2
R416 810 000		10		± 0.50	≤ 1.20	≤ 1.30	≤ 1.40	10	250	2
R416 820 000		20		± 0.50	≤ 1.20	≤ 1.30	≤ 1.40	10	250	2

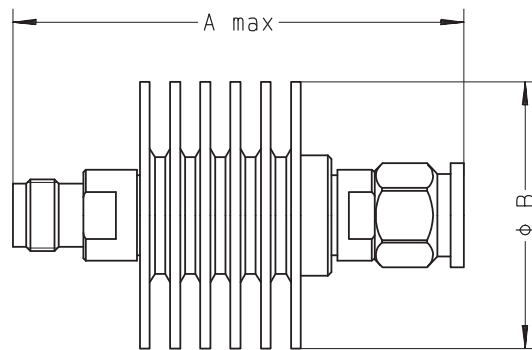
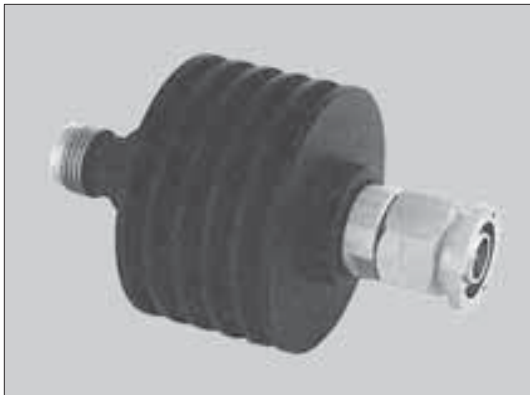
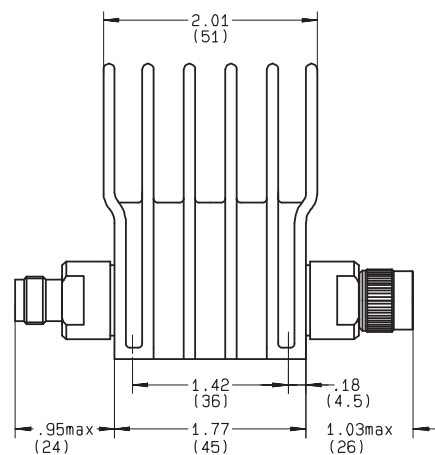
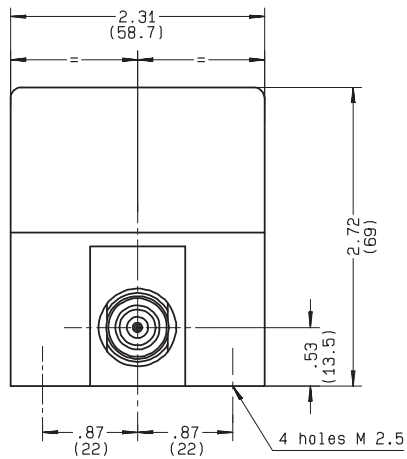


Figure	A inch (mm)	B inch (mm)	Weight (g)
1	1.81" (46)	1.02" (26)	70
2	2.75" (70)	1.57" (40)	90



### 25 WATTS MEDIUM POWER

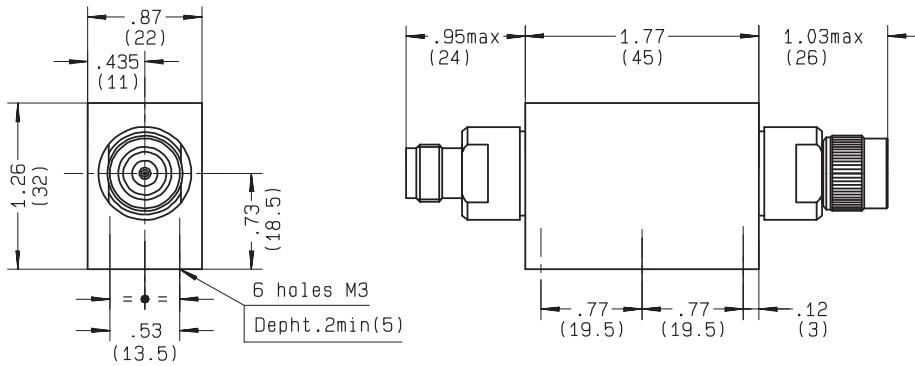
Part Number	Frequency range (GHz)	ATTENUATION (dB)		V.S.W.R.			Power (W) peak	Weight (Max) (g)
		Nominal	DEVIATION	DC - 1	1 - 2	2 - 4		
			DC - 4					
R417 603 110	DC - 4	3	± 0.60	≤ 1.10	≤ 1.20	≤ 1.35	5000	350
R417 606 110		6	± 0.60	≤ 1.10	≤ 1.20	≤ 1.35	5000	350
R417 610 110		10	± 0.60	≤ 1.10	≤ 1.20	≤ 1.35	5000	350
R417 620 110		20	± 0.80	≤ 1.10	≤ 1.20	≤ 1.35	5000	350
R417 630 110		30	± 0.80	≤ 1.10	≤ 1.20	≤ 1.35	5000	350



### 30 WATTS MEDIUM POWER

Part Number	Frequency range (GHz)	ATTENUATION (dB)		V.S.W.R.			Power (W) peak	Weight (Max) (g)
		Nominal	DEVIATION	DC - 1	1 - 2	2 - 4		
			DC - 4					
R417 603 130	DC - 4	3	± 0.60	≤ 1.10	≤ 1.20	≤ 1.35	5000	150
R417 606 130		6	± 0.60	≤ 1.10	≤ 1.20	≤ 1.35	5000	150
R417 610 130		10	± 0.60	≤ 1.10	≤ 1.20	≤ 1.35	5000	150
R417 620 130		20	± 0.80	≤ 1.10	≤ 1.20	≤ 1.35	5000	150
R417 630 130		30	± 0.80	≤ 1.10	≤ 1.20	≤ 1.35	5000	150

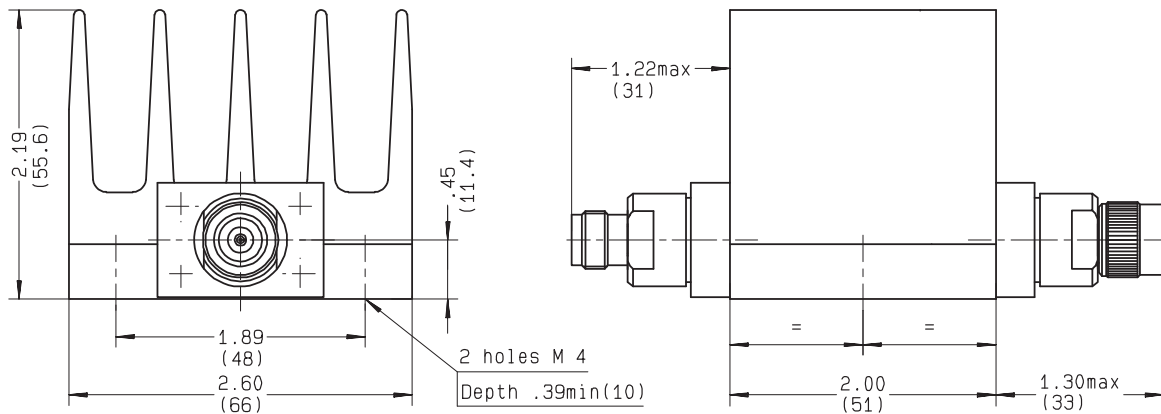
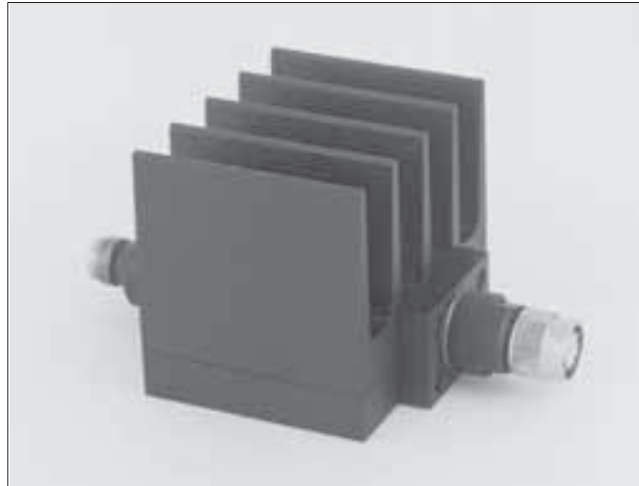
**NOTA :** These attenuators must be used with conduction cooling, a 78 sq. in. plate \*1/8" (500 cm<sup>2</sup>\* 3mm) min. is required.



### 50 WATTS MEDIUM POWER

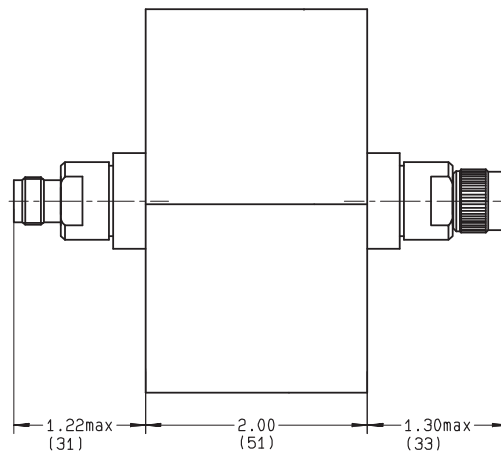
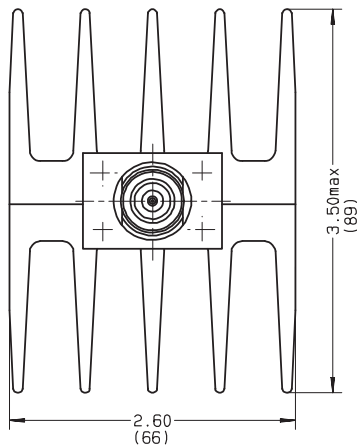
Part Number	Frequency range (GHz)	ATTENUATION (dB)		V.S.W.R.			Power (W) peak	Weight (Max) (g)
		Nominal	DEVIATION	DC - 1	1 - 2	2 - 3		
							DC - 3	
R417 203 120	DC - 3	3	± 0.70	≤ 1.10	≤ 1.25	≤ 1.35	5000	350
R417 206 120		6	± 0.70	≤ 1.10	≤ 1.25	≤ 1.35	5000	350
R417 210 120		10	± 0.70	≤ 1.10	≤ 1.25	≤ 1.35	5000	350
R417 220 120		20	± 2.00	≤ 1.10	≤ 1.25	≤ 1.35	5000	350
R417 230 120		30	± 2.00	≤ 1.10	≤ 1.25	≤ 1.35	5000	350

**NOTA :** These attenuators can be used with conduction cooling (50 Watts) or convection cooling (40 Watts)  
For conduction cooling a 78 sq. in. plate \*1/8" (500 cm<sup>2</sup> \* 3mm) min. is required.



### 50 WATTS MEDIUM POWER

Part Number	Frequency range (GHz)	ATTENUATION (dB)		V.S.W.R.			Power (W) peak	Weight (Max) (g)
		Nominal	DEVIATION	DC - 1	1 - 2	2 - 3		
			DC - 3					
R417 203 110	DC - 3	3	± 0.70	≤ 1.10	≤ 1.25	≤ 1.35	5000	430
R417 206 110		6	± 0.70	≤ 1.10	≤ 1.25	≤ 1.35	5000	430
R417 210 110		10	± 0.70	≤ 1.10	≤ 1.25	≤ 1.35	5000	430
R417 220 110		20	± 2.00	≤ 1.10	≤ 1.25	≤ 1.35	5000	430
R417 230 110		30	± 2.00	≤ 1.10	≤ 1.25	≤ 1.35	5000	430



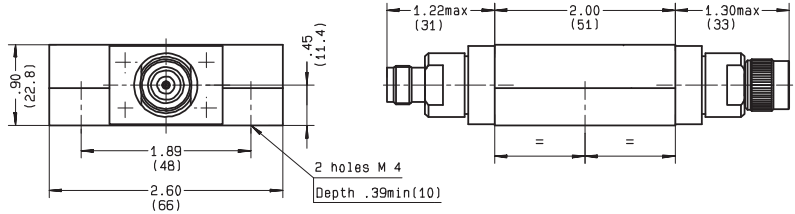
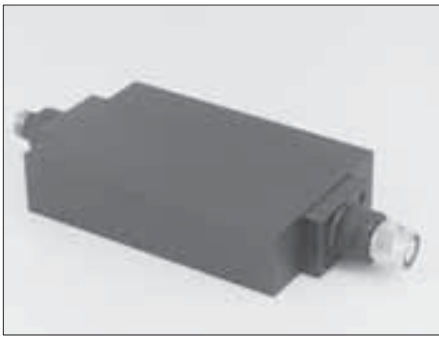
# Coaxial Attenuators

## STANDARD COAXIAL ATTENUATORS TNC

### 50 WATTS MEDIUM POWER

Part Number	Frequency range (GHz)	ATTENUATION (dB)		V.S.W.R.			Power (W)		Weight (Max) (g)
		Nominal	DEVIATION	DC - 1	1 - 2	2 - 3	peak		
			DC - 3						
R417 203 130	DC - 3	3	± 0.70	≤ 1.10	≤ 1.25	≤ 1.35	5000	280	
R417 206 130		6	± 0.70	≤ 1.10	≤ 1.25	≤ 1.35	5000	280	
R417 210 130		10	± 0.70	≤ 1.10	≤ 1.25	≤ 1.35	5000	280	
R417 220 130		20	± 2.00	≤ 1.10	≤ 1.25	≤ 1.35	5000	280	
R417 230 130		30	± 2.00	≤ 1.10	≤ 1.25	≤ 1.35	5000	280	

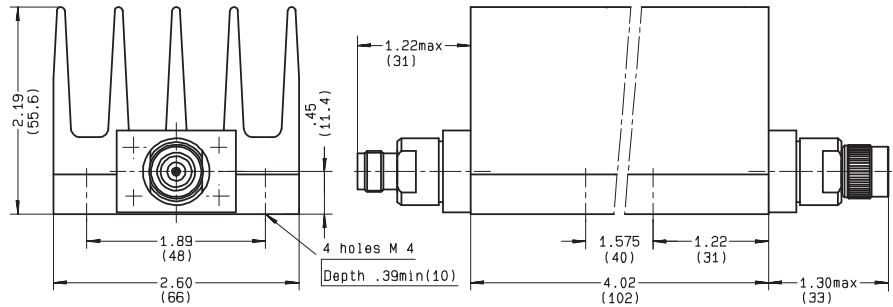
NOTA : These attenuators must be used with conduction cooling, a 78 sq. in. plate \*1/8" (500 cm<sup>2</sup>\* 3mm) min. is required.



### 80 - 100 WATTS HIGH POWER

Part Number	Frequency range (GHz)	ATTENUATION (dB)		V.S.W.R.		Power (W)		Weight (Max) (g)
		Nominal	DEVIATION	DC - 1	1 - 2	avg.	peak	
			DC - 2					
R417 903 128	DC - 2	3	± 1.00	≤ 1.10	≤ 1.25	100	5000	650
R417 906 128		6	± 1.00	≤ 1.10	≤ 1.25	100	5000	650
R417 910 128		10	± 1.00	≤ 1.10	≤ 1.25	80	5000	650
R417 920 128		20	± 1.00	≤ 1.10	≤ 1.25	80	5000	650

NOTA : These attenuators can be used with conduction cooling (100 and 80 Watts) or convection cooling (80 and 50 Watts)  
For conduction cooling a 156 sq. in. plate \*1/8" (1000 cm<sup>2</sup> \* 3mm) min. is required.



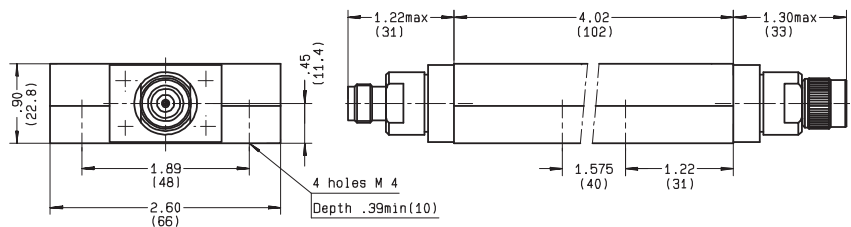
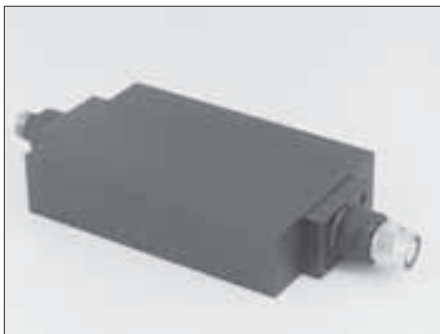
# Coaxial Attenuators

## STANDARD COAXIAL ATTENUATORS TNC

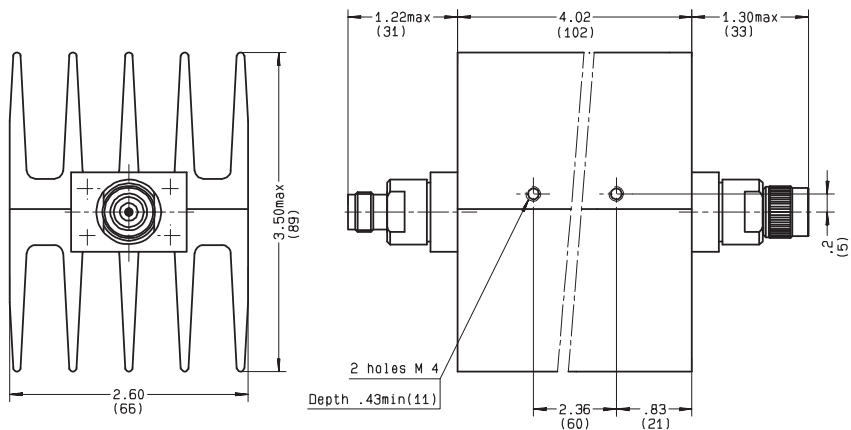
### 80 - 100 WATTS HIGH POWER

Part Number	Frequency range (GHz)	ATTENUATION (dB)		V.S.W.R.		Power (W)		Weight (Max) (g)
		Nominal	DEVIATION	DC - 1	1 - 2	avg.	peak	
			DC - 2					
R417 903 138	DC - 2	3	± 1.00	≤ 1.10	≤ 1.25	100	5000	580
R417 906 138		6	± 1.00	≤ 1.10	≤ 1.25	100	5000	580
R417 910 138		10	± 1.00	≤ 1.10	≤ 1.25	80	5000	580
R417 920 138		20	± 1.00	≤ 1.10	≤ 1.25	80	5000	580

NOTA : These attenuators must be used with conduction cooling, a 156 sq. in. plate \*1/8" (1000 cm<sup>2</sup>\* 3mm) min. is required.

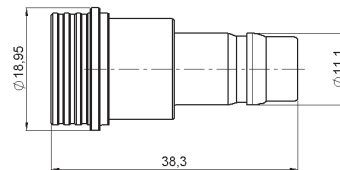


Part Number	Frequency range (GHz)	ATTENUATION (dB)		V.S.W.R.		Power (W)		Weight (Max) (g)
		Nominal	DEVIATION	DC - 1	1 - 2	avg.	peak	
			DC - 2					
R417 903 118	DC - 2	3	± 1.00	≤ 1.10	≤ 1.25	100	5000	1050
R417 906 118		6	± 1.00	≤ 1.10	≤ 1.25	100	5000	1050
R417 910 118		10	± 1.00	≤ 1.10	≤ 1.25	80	5000	1050
R417 920 118		20	± 1.00	≤ 1.10	≤ 1.25	80	5000	1050



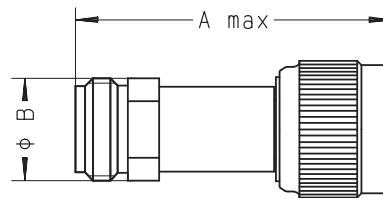
### 1 WATT, STANDARD TYPE

Part number	Frequency range (GHz)	ATTENUATION (dB)			V.S.W.R.		Power (W)
		Nom.	DEVIATION		DC - 2	2 - 3	peak
			DC - 2	2 - 3			
R411 300 124	DC - 3	0	+ 0,3	+ 0,5	≤ 1,20	≤ 1,30	100
R411 301 124		1	± 0,3	± 0,5	≤ 1,20	≤ 1,30	100
R411 302 124		2	± 0,3	± 0,5	≤ 1,20	≤ 1,30	100
R411 303 124		3	± 0,3	± 0,5	≤ 1,20	≤ 1,30	100
R411 304 124		4	± 0,3	± 0,5	≤ 1,20	≤ 1,30	100
R411 305 124		5	± 0,3	± 0,5	≤ 1,20	≤ 1,30	100
R411 306 124		6	± 0,3	± 0,5	≤ 1,20	≤ 1,30	100
R411 307 124		7	± 0,5	± 0,5	≤ 1,20	≤ 1,30	100
R411 308 124		8	± 0,5	± 0,5	≤ 1,20	≤ 1,30	100
R411 309 124		9	± 0,5	± 0,5	≤ 1,20	≤ 1,30	100
R411 310 124		10	± 0,5	± 0,5	≤ 1,20	≤ 1,30	100
R411 311 124		11	± 0,5	± 0,5	≤ 1,20	≤ 1,30	100
R411 312 124		12	± 0,5	± 0,5	≤ 1,20	≤ 1,30	100
R411 313 124		13	± 0,5	± 0,5	≤ 1,20	≤ 1,30	100
R411 314 124		14	± 0,5	± 0,5	≤ 1,20	≤ 1,30	100
R411 315 124		15	± 0,5	± 0,5	≤ 1,20	≤ 1,30	100
R411 316 124		16	± 0,7	± 0,7	≤ 1,20	≤ 1,30	100
R411 317 124		17	± 0,7	± 0,7	≤ 1,20	≤ 1,30	100
R411 318 124		18	± 0,7	± 0,7	≤ 1,20	≤ 1,30	100
R411 319 124		19	± 0,7	± 0,7	≤ 1,20	≤ 1,30	100
R411 320 124		20	± 0,7	± 0,7	≤ 1,20	≤ 1,30	100



### 1 WATT, STANDARD TYPE

Part Number	Frequency range (GHz)	ATTENUATION (dB)			V.S.W.R.		Power (W)
		Nominal	DEVIATION		DC - 2	2 - 3	peak
			CC - 2	2 - 3			
R412 700 124	DC - 3	0	+ 0,3	+ 0,5	≤ 1,20	≤ 1,30	100
R412 701 124		1	± 0,3	± 0,5	≤ 1,20	≤ 1,30	100
R412 702 124		2	± 0,3	± 0,5	≤ 1,20	≤ 1,30	100
R412 703 124		3	± 0,3	± 0,5	≤ 1,20	≤ 1,30	100
R412 704 124		4	± 0,3	± 0,5	≤ 1,20	≤ 1,30	100
R412 705 124		5	± 0,3	± 0,5	≤ 1,20	≤ 1,30	100
R412 706 124		6	± 0,3	± 0,5	≤ 1,20	≤ 1,30	100
R412 707 124		7	± 0,5	± 0,5	≤ 1,20	≤ 1,30	100
R412 708 124		8	± 0,5	± 0,5	≤ 1,20	≤ 1,30	100
R412 709 124		9	± 0,5	± 0,5	≤ 1,20	≤ 1,30	100
R412 710 124		10	± 0,5	± 0,5	≤ 1,20	≤ 1,30	100
R412 711 124		11	± 0,5	± 0,5	≤ 1,20	≤ 1,30	100
R412 712 124		12	± 0,5	± 0,5	≤ 1,20	≤ 1,30	100
R412 713 124		13	± 0,5	± 0,5	≤ 1,20	≤ 1,30	100
R412 714 124		14	± 0,5	± 0,5	≤ 1,20	≤ 1,30	100
R412 715 124		15	± 0,5	± 0,5	≤ 1,20	≤ 1,30	100
R412 716 124		16	± 0,7	± 0,7	≤ 1,20	≤ 1,30	100
R412 717 124		17	± 0,7	± 0,7	≤ 1,20	≤ 1,30	100
R412 718 124		18	± 0,7	± 1,0	≤ 1,20	≤ 1,30	100
R412 719 124		19	± 0,7	± 1,0	≤ 1,20	≤ 1,30	100
R412 720 124		20	± 0,7	± 1,0	≤ 1,20	≤ 1,30	100



A inch (mm)	B inch (mm)	Weight (g)
1.38" (35)	.62" (15.8)	43



### 2 WATTS FLAT FREQUENCY RESPONSE, HIGH PERFORMANCE

Part Number	Frequency range (GHz)	ATTENUATION (dB)		V.S.W.R.	Power (W)		Figure	
		Nominal	DEVIATION		DC - 2	avg.		peak
			CC - 2					
R412 700 000	DC - 2	0	+ 0,35	$\leq 1,20$	2	100	1	
R412 701 000		1	$\pm 0,35$	$\leq 1,15$	2	100	1	
R412 702 000		2	$\pm 0,35$	$\leq 1,15$	2	100	1	
R412 703 000		3	$\pm 0,35$	$\leq 1,15$	2	100	1	
R412 704 000		4	$\pm 0,35$	$\leq 1,15$	2	100	1	
R412 705 000		5	$\pm 0,35$	$\leq 1,15$	2	100	1	
R412 706 000		6	$\pm 0,35$	$\leq 1,15$	2	100	1	
R412 707 000		7	$\pm 0,35$	$\leq 1,15$	2	100	1	
R412 708 000		8	$\pm 0,35$	$\leq 1,15$	2	100	1	
R412 709 000		9	$\pm 0,35$	$\leq 1,15$	2	100	1	
R412 710 000		10	$\pm 0,35$	$\leq 1,15$	2	100	1	
R412 711 000		11	$\pm 0,35$	$\leq 1,15$	2	100	1	
R412 712 000		12	$\pm 0,35$	$\leq 1,15$	2	100	1	
R412 713 000		13	$\pm 0,35$	$\leq 1,15$	2	100	1	
R412 714 000		14	$\pm 0,35$	$\leq 1,15$	2	100	1	
R412 715 000		15	$\pm 0,35$	$\leq 1,15$	2	100	1	
R412 720 000		20	$\pm 0,45$	$\leq 1,15$	2	100	1	
R412 730 000		30	$\pm 0,80$	$\leq 1,15$	2	100	2	
R412 740 000		40	$\pm 0,80$	$\leq 1,15$	2	100	2	
R412 750 000		50	$\pm 1,00$	$\leq 1,15$	2	100	2	

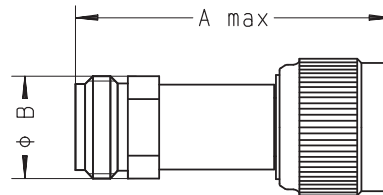


Figure	A inch (mm)	B inch (mm)	Weight (g)
1	1.97" (50)	.62" (15.8)	60
2	2.39" (60.7)		70

### 2 WATTS, STANDARD TYPE

Part Number	Frequency range (GHz)	ATTENUATION (dB)				V.S.W.R.			Power (W) peak	Fig.
		Nom.	DEVIATION			DC - 4	4 - 8	8 - 12.4		
			DC - 4	4 - 8	8 - 12.4					
R414 700 000	DC - 12.4	0	+ 0.30	+ 0.50	+ 0.70	≤ 1.20	≤ 1.25	≤ 1.40	100	1
R414 701 000		1	± 0.30	± 0.50	± 0.70	≤ 1.12	≤ 1.15	≤ 1.20	100	1
R414 702 000		2	± 0.30	± 0.50	± 0.70	≤ 1.12	≤ 1.15	≤ 1.20	100	1
R414 703 000		3	± 0.30	± 0.50	± 0.70	≤ 1.12	≤ 1.15	≤ 1.20	100	1
R414 704 000		4	± 0.30	± 0.50	± 0.70	≤ 1.12	≤ 1.15	≤ 1.20	100	1
R414 705 000		5	± 0.30	± 0.50	± 0.70	≤ 1.12	≤ 1.15	≤ 1.20	100	1
R414 706 000		6	± 0.30	± 0.50	± 0.70	≤ 1.12	≤ 1.15	≤ 1.20	100	1
R414 707 000		7	± 0.30	± 0.50	± 0.70	≤ 1.12	≤ 1.15	≤ 1.20	100	1
R414 708 000		8	± 0.30	± 0.50	± 0.70	≤ 1.12	≤ 1.15	≤ 1.20	100	1
R414 709 000		9	± 0.30	± 0.50	± 0.70	≤ 1.12	≤ 1.15	≤ 1.20	100	1
R414 710 000		10	± 0.30	± 0.50	± 0.70	≤ 1.12	≤ 1.15	≤ 1.20	100	1
R414 711 000		11	± 0.30	± 0.50	± 0.70	≤ 1.12	≤ 1.15	≤ 1.20	100	1
R414 712 000		12	± 0.30	± 0.50	± 0.70	≤ 1.12	≤ 1.15	≤ 1.20	100	1
R414 713 000		13	± 0.30	± 0.50	± 0.70	≤ 1.12	≤ 1.15	≤ 1.20	100	1
R414 714 000		14	± 0.30	± 0.50	± 0.70	≤ 1.12	≤ 1.15	≤ 1.20	100	1
R414 715 000		15	± 0.50	± 0.50	± 0.70	≤ 1.12	≤ 1.15	≤ 1.20	100	1
R414 720 000		20	± 0.50	± 0.50	± 0.70	≤ 1.12	≤ 1.15	≤ 1.20	100	1
R414 725 000		25	± 0.80	± 0.80	± 1.20	≤ 1.12	≤ 1.15	≤ 1.20	100	2
R414 730 000		30	± 0.80	± 0.80	± 1.20	≤ 1.12	≤ 1.15	≤ 1.20	100	2
R414 740 000		40	± 0.80	± 0.80	± 1.30	≤ 1.12	≤ 1.15	≤ 1.20	100	2
R414 750 000		50	± 1.00	± 1.20	± 1.50	≤ 1.12	≤ 1.15	≤ 1.20	100	2
R414 760 000		60	± 1.20	± 1.20	± 1.20	≤ 1.12	≤ 1.15	≤ 1.20	100	2

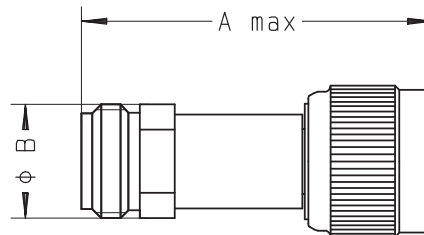
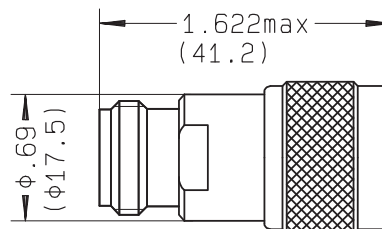


Figure	A inch (mm)	B inch (mm)	Weight (g)
1	1.97" (50)	.62"(15.9)	60
2	2.39" (60.7)		70

### 2 WATTS, HIGH PERFORMANCE TYPE

Part Number	Frequency range (GHz)	ATTENUATION (dB)		V.S.W.R.					Power (W)	Weight (Max) (g)
		Nom.	DEVIATION	DC - 4	4 - 8	8 - 12.4	12.4 - 18	peak		
									DC - 18	
R414 700 161	DC - 18	0	+ 0.40	≤ 1.15	≤ 1.20	≤ 1.25	≤ 1.35	100	60	
R414 701 161		1	± 0.40	≤ 1.15	≤ 1.20	≤ 1.25	≤ 1.35	100	60	
R414 702 161		2	± 0.40	≤ 1.15	≤ 1.20	≤ 1.25	≤ 1.35	100	60	
R414 703 161		3	± 0.40	≤ 1.15	≤ 1.20	≤ 1.25	≤ 1.35	100	60	
R414 704 161		4	± 0.40	≤ 1.15	≤ 1.20	≤ 1.25	≤ 1.35	100	60	
R414 705 161		5	± 0.40	≤ 1.15	≤ 1.20	≤ 1.25	≤ 1.35	100	60	
R414 706 161		6	± 0.40	≤ 1.15	≤ 1.20	≤ 1.25	≤ 1.35	100	60	
R414 707 161		7	± 0.50	≤ 1.15	≤ 1.20	≤ 1.25	≤ 1.35	100	60	
R414 708 161		8	± 0.50	≤ 1.15	≤ 1.20	≤ 1.25	≤ 1.35	100	60	
R414 709 161		9	± 0.50	≤ 1.15	≤ 1.20	≤ 1.25	≤ 1.35	100	60	
R414 710 161		10	± 0.50	≤ 1.15	≤ 1.20	≤ 1.25	≤ 1.35	100	60	
R414 711 161		11	± 0.50	≤ 1.15	≤ 1.20	≤ 1.25	≤ 1.35	100	60	
R414 712 161		12	± 0.50	≤ 1.15	≤ 1.20	≤ 1.25	≤ 1.35	100	60	
R414 713 161		13	± 0.50	≤ 1.15	≤ 1.20	≤ 1.25	≤ 1.35	100	60	
R414 714 161		14	± 0.50	≤ 1.15	≤ 1.20	≤ 1.25	≤ 1.35	100	60	
R414 715 161		15	± 0.50	≤ 1.15	≤ 1.20	≤ 1.25	≤ 1.35	100	60	
R414 716 161		16	± 0.60	≤ 1.15	≤ 1.20	≤ 1.25	≤ 1.35	100	60	
R414 717 161		17	± 0.60	≤ 1.15	≤ 1.20	≤ 1.25	≤ 1.35	100	60	
R414 718 161		18	± 0.60	≤ 1.15	≤ 1.20	≤ 1.25	≤ 1.35	100	60	
R414 719 161		19	± 0.60	≤ 1.15	≤ 1.20	≤ 1.25	≤ 1.35	100	60	
R414 720 161		20	± 0.60	≤ 1.15	≤ 1.20	≤ 1.25	≤ 1.35	100	60	



### 10 to 15 WATTS MEDIUM POWER

Part Number	Frequency range (GHz)	ATTENUATION (dB)			V.S.W.R.			Power (W)		Fig.
		Nom.	DEVIATION		DC - 4	4 - 8	8 - 18	avg.	peak	
			DC - 8	1 - 18						
R415 703 000	DC - 8	3	± 0.30		≤ 1.15	≤ 1.25		15	250	1
R415 706 000		6	± 0.30		≤ 1.15	≤ 1.25		12	250	1
R415 710 000		10	± 0.30		≤ 1.15	≤ 1.25		10	250	1
R415 720 000		20	± 0.50		≤ 1.15	≤ 1.25		10	250	1
R416 003 000	DC - 18	3	± 0.50		≤ 1.20	≤ 1.30	≤ 1.40	15	250	2
R416 006 000		6	± 0.50		≤ 1.20	≤ 1.30	≤ 1.40	12	250	2
R416 010 000		10	± 0.50		≤ 1.20	≤ 1.30	≤ 1.40	10	250	2
R416 020 000		20	± 0.50		≤ 1.20	≤ 1.30	≤ 1.40	10	250	2

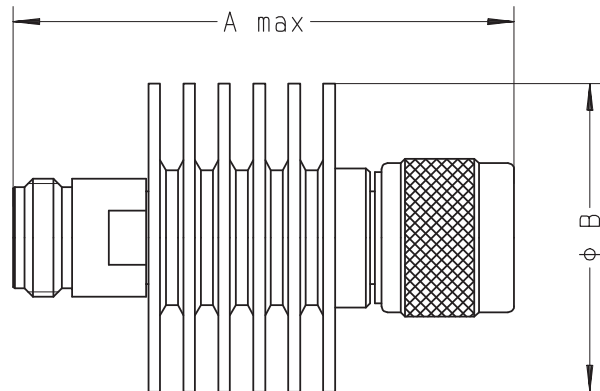
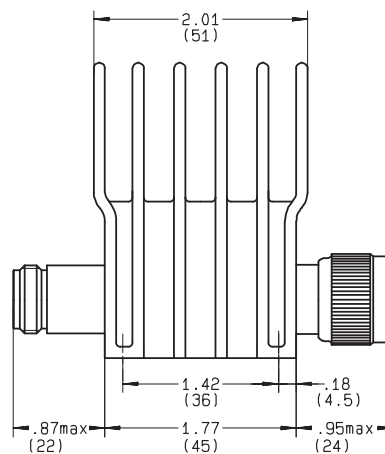
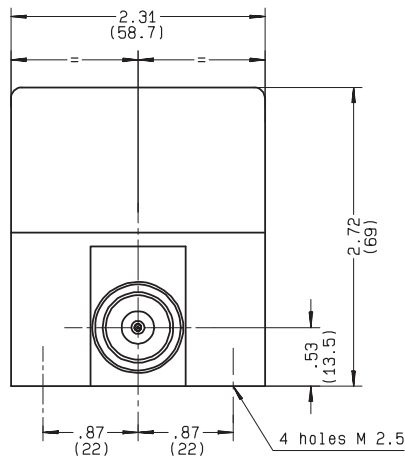


Figure	A inch (mm)	B inch (mm)	Weight (g)
1	1.97" (50)	1.02" (26)	70
2	2.66" (67.5)	1.57" (40)	110

### 25 WATTS MEDIUM POWER

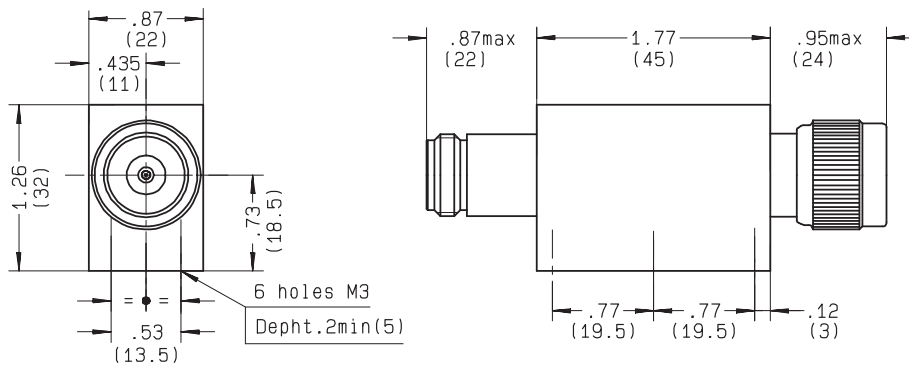
Part Number	Frequency range (GHz)	ATTENUATION (dB)		V.S.W.R.			Power (W)	Weight (Max) (g)
		Nom.	DEVIATION	DC - 1	1 - 2	2 - 4		
			DC - 4				peak	
R417 303 110	DC - 4	3	± 0.60	≤ 1.10	≤ 1.20	≤ 1.35	5000	350
R417 306 110		6	± 0.60	≤ 1.10	≤ 1.20	≤ 1.35	5000	350
R417 310 110		10	± 0.60	≤ 1.10	≤ 1.20	≤ 1.35	5000	350
R417 320 110		20	± 0.80	≤ 1.10	≤ 1.20	≤ 1.35	5000	350
R417 330 110		30	± 0.80	≤ 1.10	≤ 1.20	≤ 1.35	5000	350



### 30 WATTS MEDIUM POWER

Part Number	Frequency range (GHz)	ATTENUATION (dB)		V.S.W.R.			Power (W) peak	Weight (Max) (g)
		Nom.	DEVIATION	DC - 1	1 - 2	2 - 4		
			DC - 4					
R417 303 130	DC - 4	3	± 0.60	≤ 1.10	≤ 1.20	≤ 1.35	5000	150
R417 306 130		6	± 0.60	≤ 1.10	≤ 1.20	≤ 1.35	5000	150
R417 310 130		10	± 0.60	≤ 1.10	≤ 1.20	≤ 1.35	5000	150
R417 320 130		20	± 0.80	≤ 1.10	≤ 1.20	≤ 1.35	5000	150
R417 330 130		30	± 0.80	≤ 1.10	≤ 1.20	≤ 1.35	5000	150

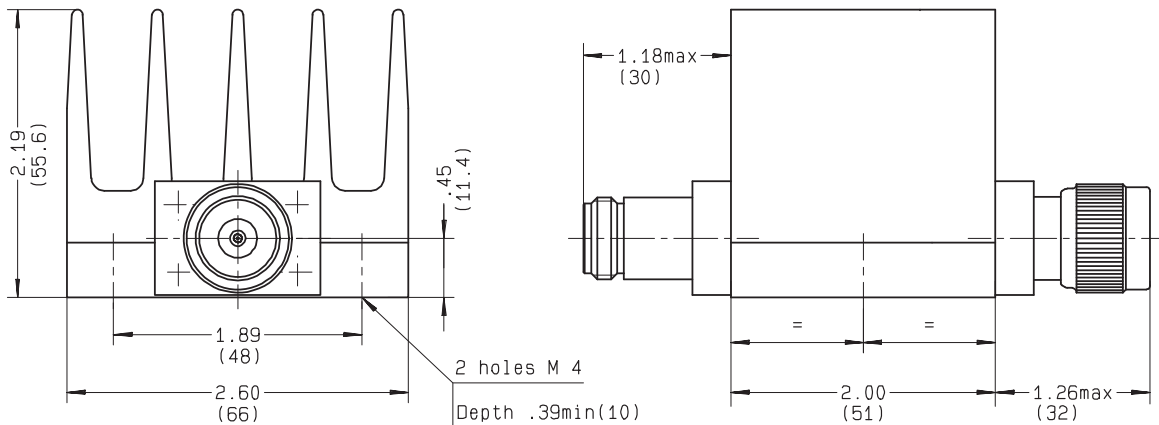
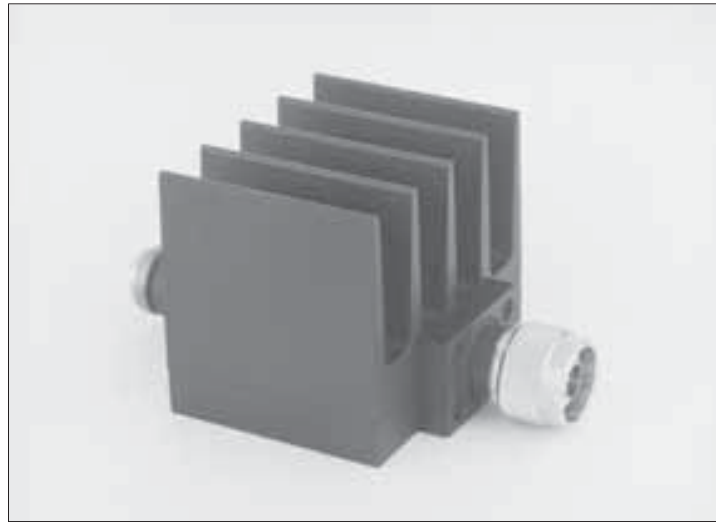
**NOTA :** These attenuators must be used with conduction cooling, a 78 sq. in. plate \*1/8" (500 cm<sup>2</sup>\* 3mm) min. is required.



### 50 WATTS MEDIUM POWER

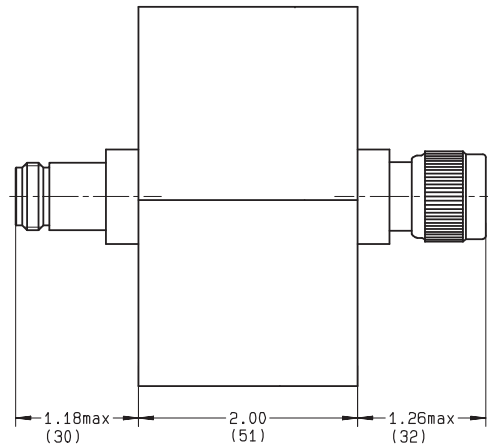
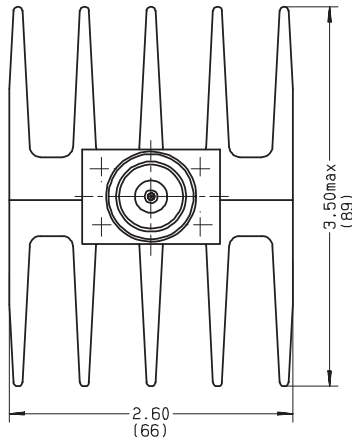
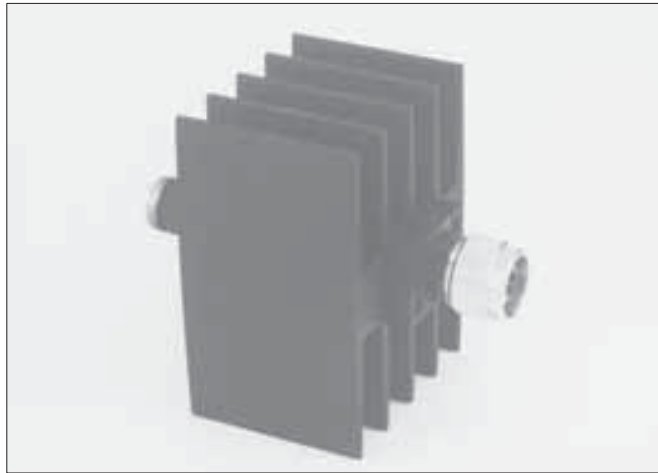
Part Number	Frequency range (GHz)	ATTENUATION (dB)		V.S.W.R.			Power (W) peak	Weight (Max) (g)
		Nom.	DEVIATION	DC - 1	1 - 2	2 - 3		
			DC - 3					
R417 003 120	DC - 3	3	± 0.70	≤ 1.10	≤ 1.25	≤ 1.35	5000	350
R417 006 120		6	± 0.70	≤ 1.10	≤ 1.25	≤ 1.35	5000	350
R417 010 120		10	± 0.70	≤ 1.10	≤ 1.25	≤ 1.35	5000	350
R417 020 120		20	± 2.00	≤ 1.10	≤ 1.25	≤ 1.35	5000	350
R417 030 120		30	± 2.00	≤ 1.10	≤ 1.25	≤ 1.35	5000	350

**NOTA :** These attenuators can be used with conduction cooling (50 Watts) or convection cooling (40 Watts)  
For conduction cooling a 78 sq. in. plate \*1/8" (500 cm<sup>2</sup> \* 3mm) min. is required.



### 50 WATTS MEDIUM POWER

Part Number	Frequency range (GHz)	ATTENUATION (dB)		V.S.W.R.			Power (W)	Weight (Max) (g)
		Nom.	DEVIATION	DC - 1	1 - 2	2 - 3	peak	
			DC - 3					
R417 003 110	DC - 3	3	± 0.70	≤ 1.10	≤ 1.25	≤ 1.35	5000	430
R417 006 110		6	± 0.70	≤ 1.10	≤ 1.25	≤ 1.35	5000	430
R417 010 110		10	± 0.70	≤ 1.10	≤ 1.25	≤ 1.35	5000	430
R417 020 110		20	± 2.00	≤ 1.10	≤ 1.25	≤ 1.35	5000	430
R417 030 110		30	± 2.00	≤ 1.10	≤ 1.25	≤ 1.35	5000	430

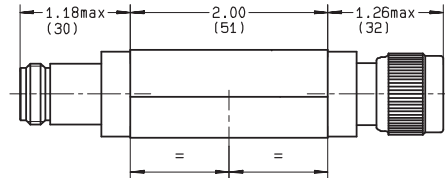
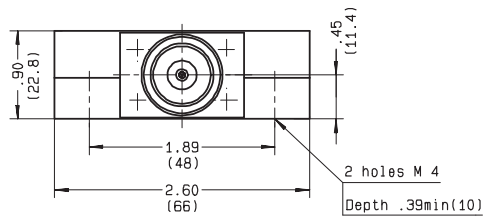




### 50 WATTS MEDIUM POWER

Part Number	Frequency range (GHz)	ATTENUATION (dB)		V.S.W.R.			Power (W) peak	Weight (Max) (g)
		Nom.	DEVIATION	DC - 1	1 - 2	2 - 3		
R417 003 130	DC - 3	3	± 0.70	≤ 1.10	≤ 1.25	≤ 1.35	5000	280
R417 006 130		6	± 0.70	≤ 1.10	≤ 1.25	≤ 1.35	5000	280
R417 010 130		10	± 0.70	≤ 1.10	≤ 1.25	≤ 1.35	5000	280
R417 020 130		20	± 2.00	≤ 1.10	≤ 1.25	≤ 1.35	5000	280
R417 030 130		30	± 2.00	≤ 1.10	≤ 1.25	≤ 1.35	5000	280

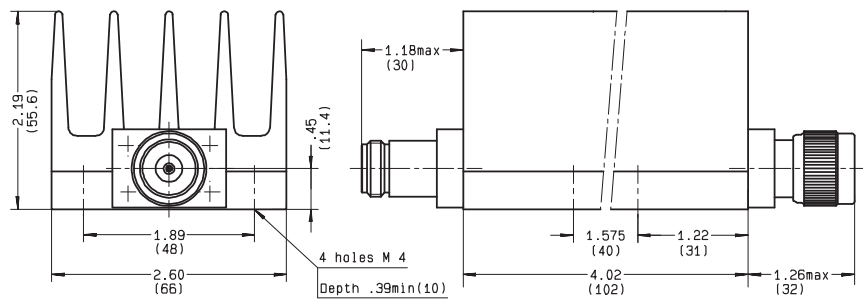
NOTA : These attenuators must be used with conduction cooling, a 78 sq. in. plate \*1/8" (500 cm<sup>2</sup>\* 3mm) min. is required.



### 80 - 100 WATTS HIGH POWER

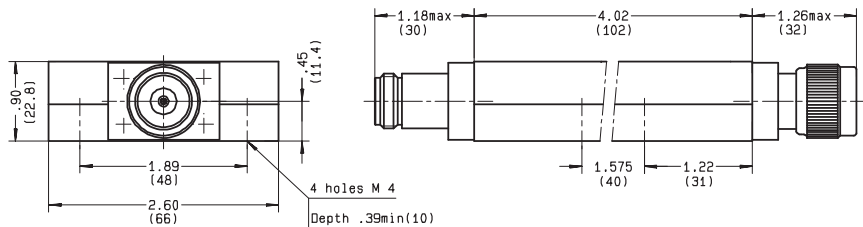
Part Number	Frequency range (GHz)	ATTENUATION (dB)		V.S.W.R.		Power (W)		Weight (Max) (g)
		Nominal	DEVIATION	DC - 1	1 - 2	avg.	peak	
			DC - 2					
R417 703 128	DC - 2	3	± 1.00	≤ 1.10	≤ 1.25	100	5000	650
R417 706 128		6	± 1.00	≤ 1.10	≤ 1.25	100	5000	650
R417 710 128		10	± 1.00	≤ 1.10	≤ 1.25	80	5000	650
R417 720 128		20	± 1.00	≤ 1.10	≤ 1.25	80	5000	650

**NOTA :** These attenuators can be used with conduction cooling (100 and 80 Watts) or convection cooling (80 and 50 Watts)  
For conduction cooling a 156 sq. in. plate \*1/8" (1000 cm<sup>2</sup> \* 3mm) min. is required.



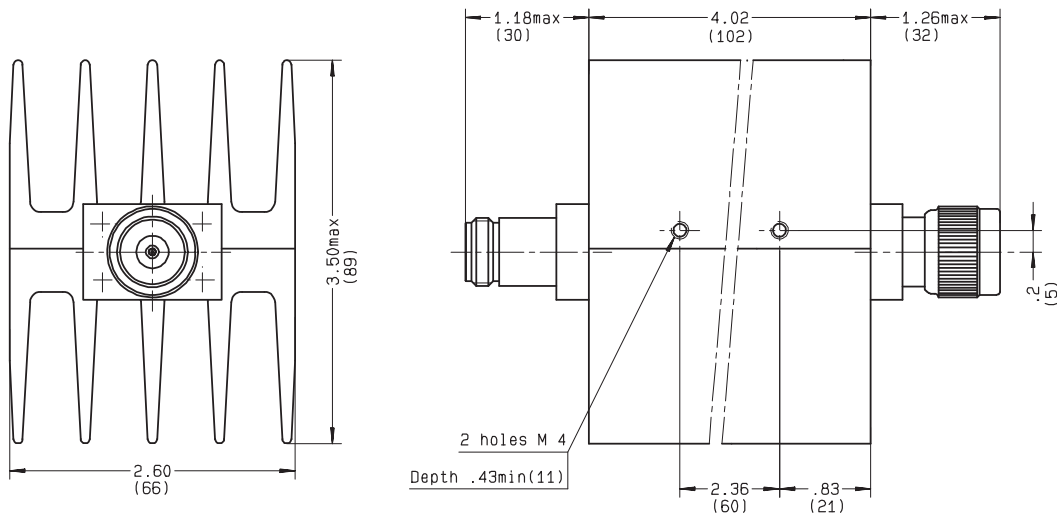
Part Number	Frequency range (GHz)	ATTENUATION (dB)		V.S.W.R.		Power (W)		Weight (Max) (g)
		Nominal	DEVIATION	DC - 1	1 - 2	avg.	peak	
			DC - 2					
R417 703 138	DC - 2	3	± 1.00	≤ 1.10	≤ 1.25	100	5000	580
R417 706 138		6	± 1.00	≤ 1.10	≤ 1.25	100	5000	580
R417 710 138		10	± 1.00	≤ 1.10	≤ 1.25	80	5000	580
R417 720 138		20	± 1.00	≤ 1.10	≤ 1.25	80	5000	580

**NOTA :** These attenuators must be used with conduction cooling, a 156 sq. in. plate \*1/8" (1000 cm<sup>2</sup> \* 3mm) min. is required.



### 80 - 100 WATTS HIGH POWER

Part Number	Frequency range (GHz)	ATTENUATION (dB)		V.S.W.R.		Power (W)		Weight (Max) (g)
		Nominal	DEVIATION	DC - 1	1 - 2	avg.	peak	
			DC - 2					
R417 703 118	DC - 2	3	± 1.00	≤ 1.10	≤ 1.25	100	5000	1050
R417 706 118		6	± 1.00	≤ 1.10	≤ 1.25	100	5000	1050
R417 710 118		10	± 1.00	≤ 1.10	≤ 1.25	80	5000	1050
R417 720 118		20	± 1.00	≤ 1.10	≤ 1.25	80	5000	1050



### 1 WATT CALIBRATED ATTENUATOR SET

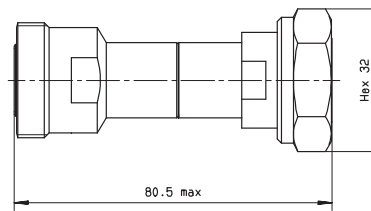
Part Number	Frequency range (GHz)	ATTENUATION (dB)		V.S.W.R.				Power (W)	Weight (Max) (g)
		Nominal	Deviation	DC - 4	4 - 8	8 - 12.4	12.4 - 18	peak	
R414 799 127	DC - 18	3	$\pm 0.40$	$\leq 1.15$	$\leq 1.20$	$\leq 1.25$	$\leq 1.35$	50	60
		6	$\pm 0.40$	$\leq 1.15$	$\leq 1.20$	$\leq 1.25$	$\leq 1.35$	50	60
		10	$\pm 0.50$	$\leq 1.15$	$\leq 1.20$	$\leq 1.25$	$\leq 1.35$	50	60
		20	$\pm 0.60$	$\leq 1.15$	$\leq 1.20$	$\leq 1.25$	$\leq 1.35$	50	60

**NOTA :** Within the box, a certificat of calibration provide both attenuation and V.S.W.R. values from DC to 18 GHz with a 1 GHz step.



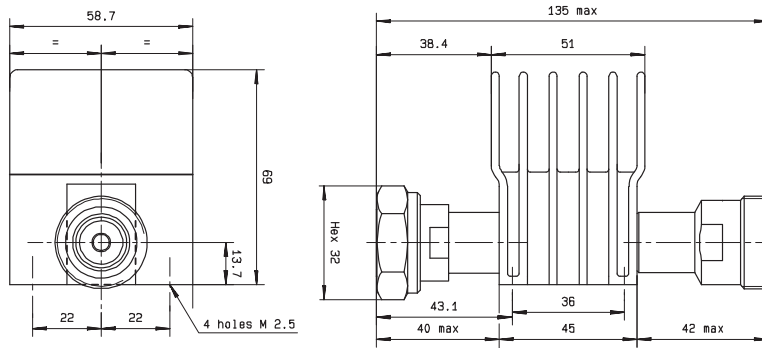
### 1 WATT

Part Number	Frequency range (GHz)	ATTENUATION (dB)			V.S.W.R.		Power (W) peak	Weight (g)
		Nominal	DEVIATION		DC - 2	2 - 3		
			DC - 2	2 - 3				
R412 803 000	DC - 3	3	± 0.30	± 0.50	≤ 1.20	≤ 1.30	100	205
R412 806 000		6	± 0.30	± 0.50	≤ 1.20	≤ 1.30	100	205
R412 810 000		10	± 0.50	± 0.50	≤ 1.20	≤ 1.30	100	205
R412 820 000		20	± 0.50	± 0.50	≤ 1.20	≤ 1.30	100	205



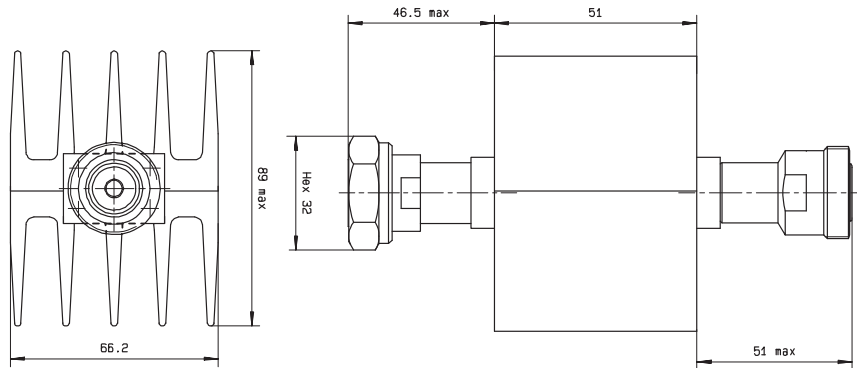
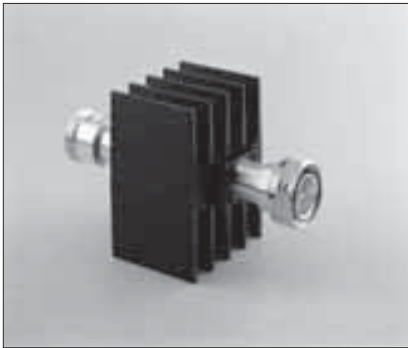
### 25 WATTS

Part Number	Frequency range (GHz)	ATTENUATION (dB)			V.S.W.R.		Power (W) peak	Weight (g)
		Nominal	DEVIATION		1 - 2	2 - 4		
			DC - 4	DC - 1				
R420 303 110	DC - 4	3	± 0.60	≤ 1.10	≤ 1.20	≤ 1.35	5000	480
R420 306 110		6	± 0.60	≤ 1.10	≤ 1.20	≤ 1.35	5000	480
R420 310 110		10	± 0.60	≤ 1.10	≤ 1.20	≤ 1.35	5000	480
R420 320 110		20	± 0.80	≤ 1.10	≤ 1.20	≤ 1.35	5000	480



### 50 WATTS

Part Number	Frequency range (GHz)	ATTENUATION (dB)			V.S.W.R.			Power (W) peak	Weight (g)
		Nominal	DEVIATION		DC - 1	1 - 2	2 - 3		
			DC - 2	2 - 3					
R420 003 110	DC - 3	3	± 0.70	± 0.70	≤ 1.10	≤ 1.25	≤ 1.35	5000	560
R420 006 110		6	± 0.60	± 0.70	≤ 1.10	≤ 1.25	≤ 1.35	5000	560
R420 010 110		10	± 0.60	± 0.70	≤ 1.10	≤ 1.25	≤ 1.35	5000	560
R420 020 110		20	± 1.0	± 2.0	≤ 1.10	≤ 1.25	≤ 1.35	5000	560



### 100 WATTS

Part Number	Frequency range (GHz)	ATTENUATION (dB)			V.S.W.R.			Power (W) peak	Weight (g)
		Nominal	DEVIATION		DC - 1	1 - 2	2 - 3		
			DC - 2	2 - 3					
R420 703 110	DC - 3	3	± 1.0	± 1.0	≤ 1.10	≤ 1.25	≤ 1.30	5000	870
R420 706 110		6	± 1.0	± 1.0	≤ 1.10	≤ 1.25	≤ 1.30	5000	870
R420 710 110		10	± 1.0	± 1.0	≤ 1.10	≤ 1.25	≤ 1.30	5000	870
R420 720 110		20	± 1.0	± 1.5	≤ 1.10	≤ 1.25	≤ 1.30	5000	870

