



**CRYSTEK**  
**MICROWAVE**  
A DIVISION OF CRYSTEK CORPORATION

# CATTEN-01R0

## 1dB Attenuator

### SMA 50 Ohm

### DC to 3GHz



Temperature Range: -40°C to +85°C  
Rated Power: 1 Watt Max  
Freq Range: DC - 3GHz  
VSWR: 1:1.3 Max  
Impedance: 50 Ohms  
Attenuation Tolerance:  $\pm 0.3$  dB



Actual Size

The Attenuator Series offers end users a rugged SMA attenuator housing for easy connection. Attenuators are available from 1dB to 20dB with 1 Watt power dissipation. Tolerance matching is used to provide superior temperature tracking to individual components. Attenuator frequency range from DC to 3GHz.



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# CATTEN-01R0

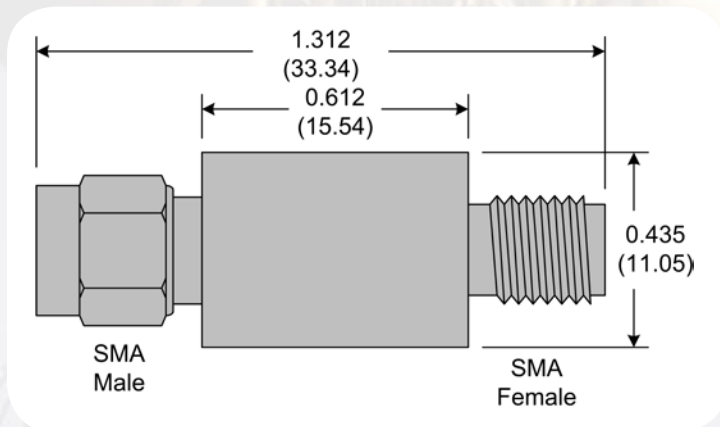
## 1dB Attenuator

### SMA 50 Ohm

### DC to 3GHz

| Part Number | Attenuation | Power (Max) |
|-------------|-------------|-------------|
| CATTEN-01R0 | 1 dB        | 1 Watt      |
| CATTEN-01R5 | 1.5 dB      | 1 Watt      |
| CATTEN-02R0 | 2 dB        | 1 Watt      |
| CATTEN-03R0 | 3 dB        | 1 Watt      |
| CATTEN-04R0 | 4 dB        | 1 Watt      |
| CATTEN-05R0 | 5 dB        | 1 Watt      |
| CATTEN-06R0 | 6 dB        | 1 Watt      |
| CATTEN-07R0 | 7dB         | 1 Watt      |
| CATTEN-08R0 | 8dB         | 1 Watt      |
| CATTEN-09R0 | 9dB         | 1 Watt      |
| CATTEN-0100 | 10 dB       | 1 Watt      |
| CATTEN-0150 | 15 dB       | 0.5 Watt    |
| CATTEN-0200 | 20 dB       | 0.5 Watt    |

| 1 dB Data   |            | Return Loss |             |
|-------------|------------|-------------|-------------|
| Freq. (MHz) | Atten (dB) | Male (dB)   | Female (dB) |
| 0.3         | 0.95       | 56          | 55          |
| 0.5         | 0.94       | 56          | 55          |
| 0.8         | 0.94       | 56          | 55          |
| 1.0         | 0.94       | 56          | 55          |
| 5.0         | 0.93       | 56          | 55          |
| 10.0        | 0.94       | 56          | 55          |
| 20.0        | 0.93       | 56          | 54          |
| 50.0        | 0.93       | 53          | 52          |
| 100.0       | 0.94       | 48          | 47          |
| 200.0       | 0.95       | 43          | 42          |
| 300.0       | 0.98       | 40          | 39          |
| 400.0       | 0.99       | 38          | 37          |
| 500.0       | 0.98       | 36          | 36          |
| 600.0       | 0.98       | 34          | 34          |
| 700.0       | 1.00       | 33          | 33          |
| 800.0       | 0.99       | 32          | 32          |
| 900.0       | 1.02       | 31          | 31          |
| 1000.0      | 0.99       | 30          | 30          |
| 1500.0      | 1.05       | 26          | 27          |
| 2000.0      | 1.11       | 22          | 22          |
| 2500.0      | 1.03       | 19          | 19          |
| 3000.0      | 1.29       | 17          | 16          |



| TEST                                    | Condition of Test                               | Test Results |             |
|-----------------------------------------|-------------------------------------------------|--------------|-------------|
|                                         |                                                 | 0.5dB to 5dB | 6dB to 20dB |
| Endurance Test at 70°C per EIA 575-3.14 | 1000 hours at 70°C, 1.5 hrs "ON", 0.5 hrs "OFF" | ± 0.2 dB     | ± 0.3 dB    |
| Overload per EIA 575-3.6                | Short time overload                             | ± 0.2 dB     | ± 0.3 dB    |
| Thermal Shock                           | per EIA 575-3.5                                 | ± 0.2 dB     | ± 0.3 dB    |
| Moisture Resistance                     | per EIA 575-3.10                                | ± 0.2 dB     | ± 0.3 dB    |
| High Temperature Exposure               | per EIA 575-3.7                                 | ± 0.2 dB     | ± 0.3 dB    |
| Low Temperature Exposure                | per EIA 575-3.12                                | ± 0.2 dB     | ± 0.3 dB    |

