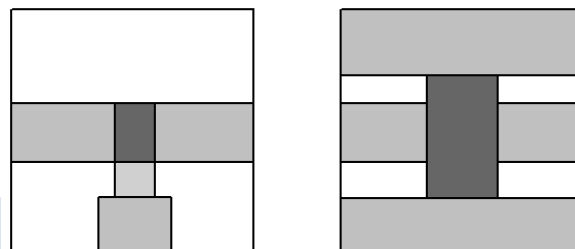


### FEATURES

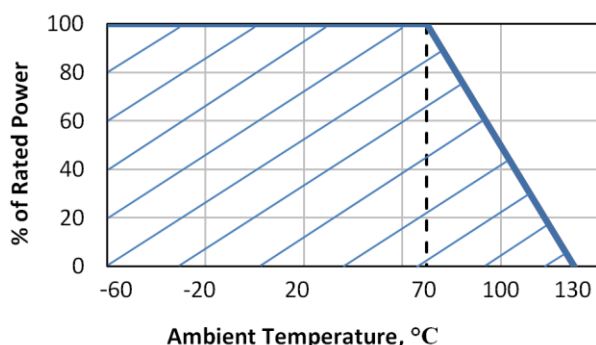
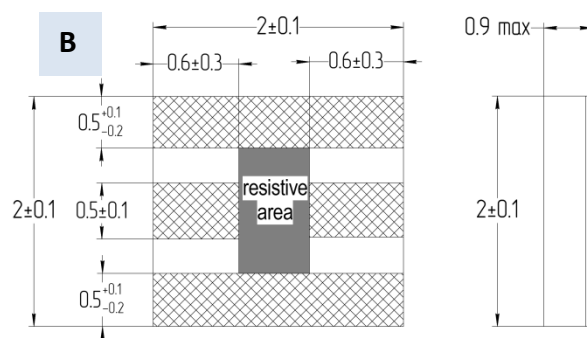
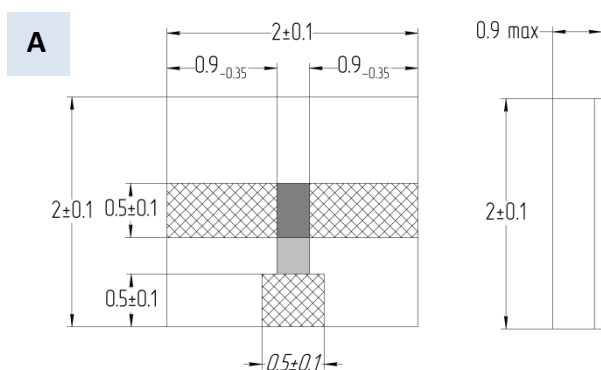
- DC to 18 GHz
- 0.5 W Power dissipation

### GENERAL SPECIFICATIONS

- **Power:** 0.5 W
- **Resistance Value:**  $50 \Omega \pm 2\%$
- **Max. Frequency DC:** 18 GHz
- **VSWR**
  - <1.2 GHz 1.15
  - 1.2-18 GHz 1.5
- **Operating Temp. Range:** -60 °C to 130 °C
- **Temperature Coefficient:**  $\pm 300 \text{ ppm}/^\circ\text{C}$
- **Max. Resistance Change at Rated Dissipation  $|\Delta R/R \text{ max.}|$  after 20000 h** 5 %
- **Max. Attenuation Change at Rated Dissipation after 20000 h, for**
  - PR1-22-B-320  $\pm 1.5 \text{ dB}$
  - PR1-22-B-160, -080  $\pm 1.2 \text{ dB}$
  - PR1-22-A-040, -020  $\pm 0.5 \text{ dB}$
  - PR1-22-A-010, -005  $\pm 0.2 \text{ dB}$
- **Process:** Thin Film
- **Substrate Material:**  $\text{Al}_2\text{O}_3$
- **Termination Finish:** Sn-Pb



Part Number	Attenuation (dB)
PR1-22-A-005	$0.5 \pm 0.1$
PR1-22-A-010	$1 \pm 0.1$
PR1-22-A-020	$2 \pm 0.1$
PR1-22-A-040	$4 \pm 0.1$
PR1-22-B-080	$8 \pm 0.1$
PR1-22-B-160	$16 \pm 0.2$
PR1-22-B-320	$32 \pm 0.5$



### PART NUMBER CODE

**PR1-22**

model

**A**

case style

A  
B

**040**

attenuation

005 = 0.5 dB  
320 = 32 dB

### PERFORMANCE CHARACTERISTICS

Test	Condition	$\Delta R$ max.
Solderability	IEC60115-1 (4.17)/ IEC 60068-2-20 3 s; iron method; SnPb40	Good tinning (>95 % covered, no visible damage)
Resistance to soldering heat	IEC60115-1 (4.18.2)/ IEC 60068-2-20 3 s; iron method	$\pm 2$ %; no visible damage
Dry heat	IEC60115-1 (4.23.2)/ IEC 60068-2-2 130°C; 30 min	$\pm 3$ %
Cold	IEC60115-1 (4.23.4)/ IEC 60068-2-1 -60 °C; 30 min	$\pm 3$ %
Rapid change of temperature	IEC60115-1 (4.19)/ IEC 60068-2-14 30 min at -60 °C; 30 min at 130 °C; 3 cycles	$\pm 2$ %
Low air pressure	IEC60115-1 (4.23.5)/ IEC 60068-2-13 0.67 kPa; 30 min; 15 °C to 35 °C	No visible damage
Vibration	IEC60115-1 (4.22)/ IEC 60068-2-6 80 sweep cycles per direction; 10 Hz to 500 Hz; 0.5 mm; 50 m/s <sup>2</sup>	$\pm 2$ %
Damp heat, steady state	IEC60115-1 (4.24)/ IEC 60068-2-78 (40 $\pm$ 2) °C; 9 days; (93 $\pm$ 3) % RH	$\pm 3$ %

All tests are carried out in accordance with the following specifications:

- IEC 60115-1 (clause),
- IEC 60068-2-xx (test method).

### PACKAGING

Carton box.

### MOUNTING PROCEDURE

Can be used only in manual assembly technique.