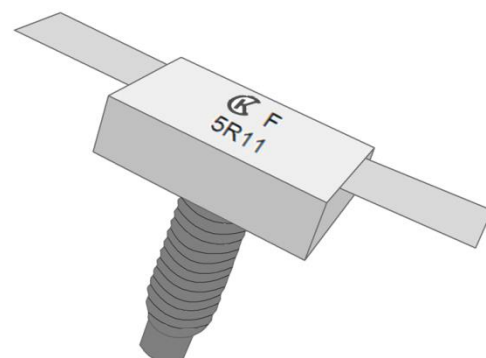


### FEATURES

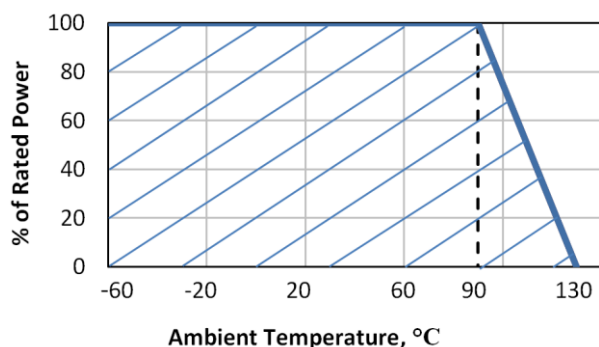
- DC to 1.5 GHz
- Flanged Model
- Climatic category 60/130/56



### GENERAL SPECIFICATIONS

Operating Temp. Range:	-60 °C to 130 °C
Load Life 90 °C/ 1000 h:	5 %
Max. Resistance Change at Rated Dissipation $ \Delta R/R \text{ max.} $ after 25000 h	10 %
Package:	Flanged
Process:	Thick film
Substrate Material:	Al <sub>2</sub> O <sub>3</sub>
Mounting Flange:	Cu, Ni plated
Leads:	Cu, Sn-Pb plated

Part Number	Power (W)	Frequency (GHz)	Resistance Value, E96 Series (Ohms)	Resistance Tolerance (± %)	Temperature Coefficient (ppm/°C)
R1-120-10	10	1,5	5.11-301 10-301	5 1	±150
R1-120-25	25	1,5	5.11-301 10-301	5 1	±150
R1-120-50	50	0,6	5.11-301 10-301	5 1	±150



### PART NUMBER CODE

**R1-120**

model

**10**

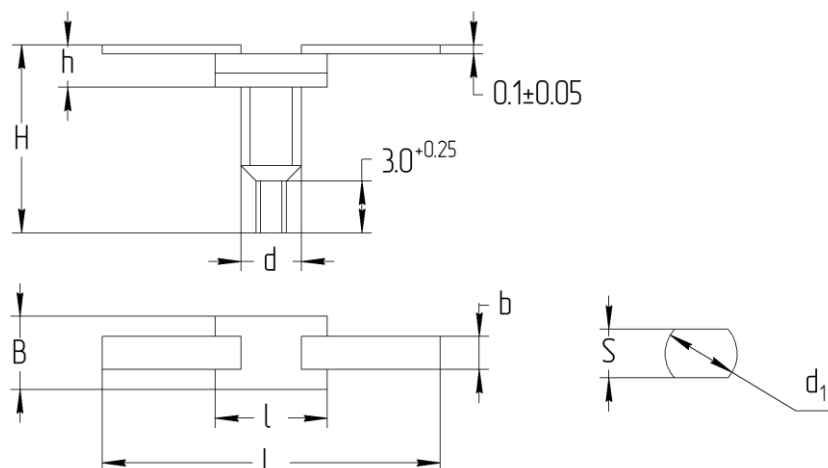
power  
10  
25  
50

**5R11**

value  
5R11 = 5.11 Ω  
3010 = 301 Ω

**F**

tolerance  
F = 1 %  
J = 5 %

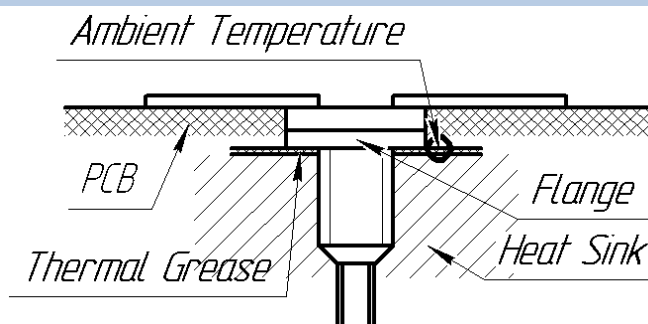


Part Number	Dimensions (mm)									Mass (g)
	L	l	B	h	b	H	d	d1	S	
R1-120-10	29 ± 4.25	9 ± 0.25	6 ± 0.25	4.5 ± 0.5	4 ± 0.25	18.5 ± 1.2	M4-6g	3 <sub>-0.25</sub>	2 <sub>-0.25</sub>	5
R1-120-25	32 ± 4.25	12 ± 0.25	8 ± 0.25	5.0 ± 0.5	4 ± 0.25	19.0 ± 1.2	M4-6g	3 <sub>-0.25</sub>	2 <sub>-0.25</sub>	8
R1-120-50	38 ± 4.25	18 ± 0.25	12 ± 0.25	5.5 ± 0.5	6 ± 0.25	22.5 ± 1.2	M6-6g	4.5 <sub>-0.3</sub>	3 <sub>-0.25</sub>	15

### MOUNTING PROCEDURE

1. The underside of the flange should be brushed with thermal grease.
2. Resistor should be fastened to the heat sink with screw.
3. Torque screw to the appropriate value.
4. Solder leads in place using appropriate solder with a controlled temperature iron.

\*\* FOR MORE DETAILS CONTACT FACTORY \*\*



### PERFORMANCE CHARACTERISTICS

Test	Condition	$\Delta R$ max.
Robustness of termination	IEC60115-1 (4.16)/ IEC 60068-2-21 Bending; Tensile (20 N)	$\pm 1.5 \%$
Solderability	IEC60115-1 (4.17)/ IEC 60068-2-20 (235 $\pm$ 5) °C; 2 s; solder bath method; SnPb40	Good tinning (>95 % covered, no visible damage)
Resistance to soldering heat	IEC60115-1 (4.18.2)/ IEC 60068-2-20 (260 $\pm$ 5) °C; (5 $\pm$ 1) s	$\pm 1 \%$ ; no visible damage
Rapid change of temperature	IEC60115-1 (4.19)/ IEC 60068-2-14 30 min at -60 °C; 30 min at 130 °C; 5 cycles	$\pm 1 \%$
Vibration	IEC60115-1 (4.22)/ IEC 60068-2-6 32 sweep cycles per direction; 10 Hz to 5000 Hz; 2 mm; 400 m/s <sup>2</sup>	$\pm 2 \%$
Dry heat	IEC60115-1 (4.23.2)/ IEC 60068-2-2 130°C; 1 h	$\pm 1 \%$
Cold	IEC60115-1 (4.23.4)/ IEC 60068-2-1 -60 °C; 1 h	$\pm 1 \%$
Low air pressure	IEC60115-1 (4.23.5)/ IEC 60068-2-13 0.0133 Pa; 30 min; 15 °C to 35 °C	No visible damage
Damp heat, steady state	IEC60115-1 (4.24)/ IEC 60068-2-78 (40 $\pm$ 2) °C; 56 days; (93 $\pm$ 3) % RH	$\pm 5 \%$

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

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

### PACKAGING

Carton box.

### MARKING (E96)

Nominal value		Marking	
5.11 $\Omega$	to 9.76 $\Omega$	5R11	to 9R76
10 $\Omega$	to 97.6 $\Omega$	10R0	to 97R6
100 $\Omega$	to 301 $\Omega$	1000	to 3010