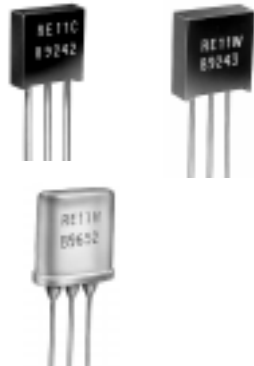



RE 11 $\begin{matrix} C \\ W \\ H \end{matrix}$

very high precision and stability resistive dividers

– bulk metal®

0,1 W at 70°C
0,25 W at 70°C


These very high precision and stability dividers offer definite advantages:

- TIGHT TOLERANCE
- ABSOLUTE TEMPERATURE COEFFICIENT TO <1 ppm/°C (0° +60°C)
- TEMPERATURE COEFFICIENT TRACKING TO 0,5 ppm/°C (–55°C to +125°C)
- HIGH STABILITY : < 500 ppm, 2000 hours, 125°C full load

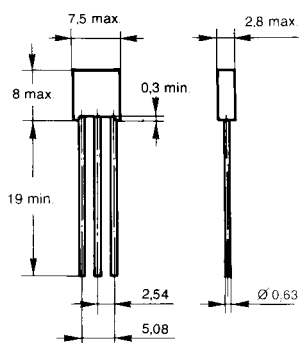
RE 11 C


Fig. 1

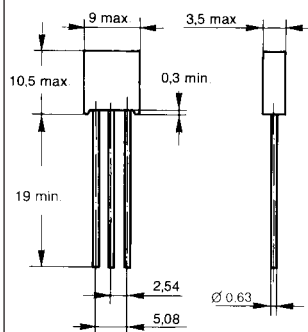
**RE 11 W
(standard)**


Fig. 2

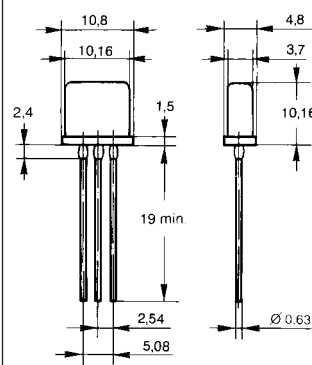
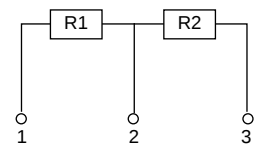
RE 11 H


Fig. 3

CIRCUIT DIAGRAM


SPECIFICATIONS

MECHANICAL

MECHANICAL PROTECTION...	insulated case (C and W) hermetically sealed case (H version)
RESISTIVE ELEMENT...	nickel-chromium
TERMINAL LEADS...	tinned copper or UE6P weldable solderable C version MIL-STD 1276
UNIT WEIGHT...	0,3 - 0,5 - 1,5 g

ENVIRONMENTAL

TEMPERATURE LIMITS...	–55°C +155°C
CLIMATIC CATEGORY...	55 / 125 / 56

ELECTRICAL

RESISTANCE VALUE RANGE	1 Ω... 250 kΩ
PER RESISTOR...	± 0,005 % ± 1 %
RESISTANCE TOLERANCE...	
TEMPERATURE COEFFICIENT	typical... ± 1 ppm/°C (0°C + 60°C) ± 2 ppm/°C (–55°C + 125°C) max.... ± 5 ppm/°C (–55°C + 155°C)
DIELECTRIC VOLTAGE...	750 V RMS
INSULATION RESISTANCE...	> 10 ⁶ MΩ
THERMO-ELECTRIC EFFECT...	< 0,5 μV for 1°C of difference between leads

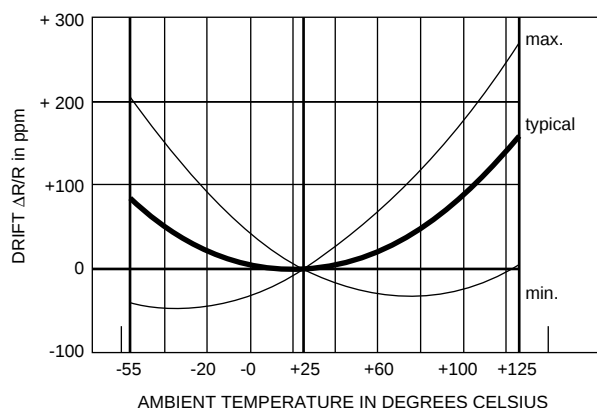
CHARACTERISTICS PER RESISTOR

Table 1

SERIES		RE 11 C	RE 11 W	RE 11 H
POWER RATING AT 70°C		0,1 W	0,25 W	0,25 W
OHMIC RANGE IN RELATION TO TOLERANCE	+0,005 %	100 Ω to 20 kΩ	50 Ω to 250 kΩ	50 Ω to 250 kΩ
	+0,01 %		25 Ω to 250 kΩ	25 Ω to 250 kΩ
	+0,02 %	50 Ω to 20 kΩ	10 Ω to 250 kΩ	10 Ω to 250 kΩ
	+0,05 %		1 Ω to 250 kΩ	1 Ω to 250 kΩ
	+0,1% to ± 1 %			
LIMITING ELEMENT VOLTAGE		40 V	150 V	150 V
CRITICAL RESISTANCE		16 kΩ	90 kΩ	90 kΩ

TEMPERATURE COEFFICIENT CHARACTERISTICS

Fig. 4



Typical values of temperature coefficient:

$\pm 2 \text{ ppm/}^\circ\text{C}$ -55°C to $+125^\circ\text{C}$

$\pm 0,6 \text{ ppm/}^\circ\text{C}$ 0°C to $+60^\circ\text{C}$

T.C. tracking can be specified as follows over the range -55°C to $+125^\circ\text{C}$

$0,5 \text{ ppm/}^\circ\text{C}$ - $1 \text{ ppm/}^\circ\text{C}$ - $2 \text{ ppm/}^\circ\text{C}$ - $3 \text{ ppm/}^\circ\text{C}$

TOLERANCE MATCHING

The resistors can be also matched from 0,005% to 1% at 25°C .

GENERAL NETWORKS

In addition to the RE11 series of dividers SFERNICE has a wide range of networks in diverse technologies to cover virtually every network need.

Please consult us for all of your network requirements.

LOAD STABILITY

With full power of 0,1 W at $+70^\circ\text{C}$ over 2000 hours the stability is $< 500 \text{ ppm}$.

With lower power stressing at lower temperatures the drift is significantly reduced.

With light signal levels at 25°C for example the load stability approaches the shelf life stability of 25 ppm/year, or 50 ppm over 3 years.

MARKING

SFERNICE trademark, series, style, nominal resistance (in Ω , $\text{k}\Omega$), tolerances (in %), manufacturing date.

ORDERING PROCEDURE

