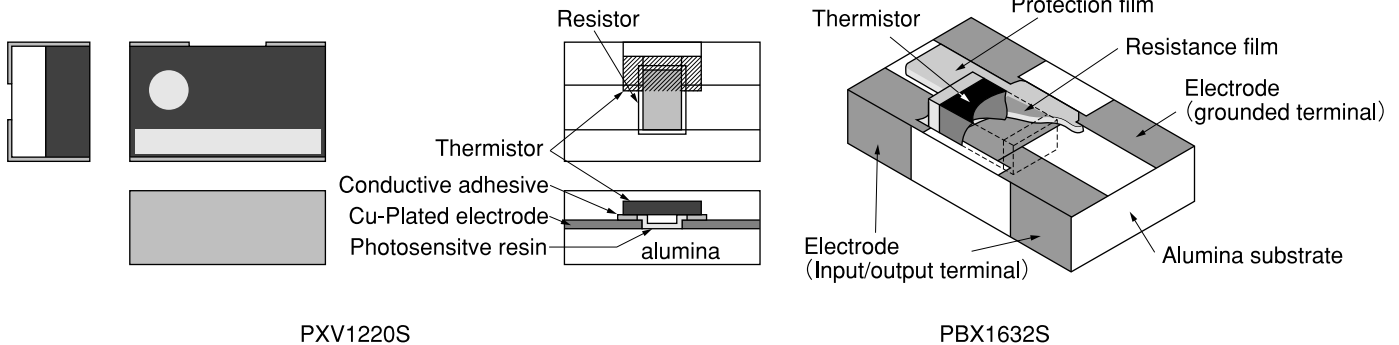


Variable Chip Attenuators

Structure

Structure :Combine a NTC at the center of a thin film chip attenuator in parallel.

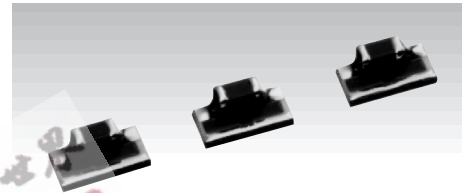


PXV1220S

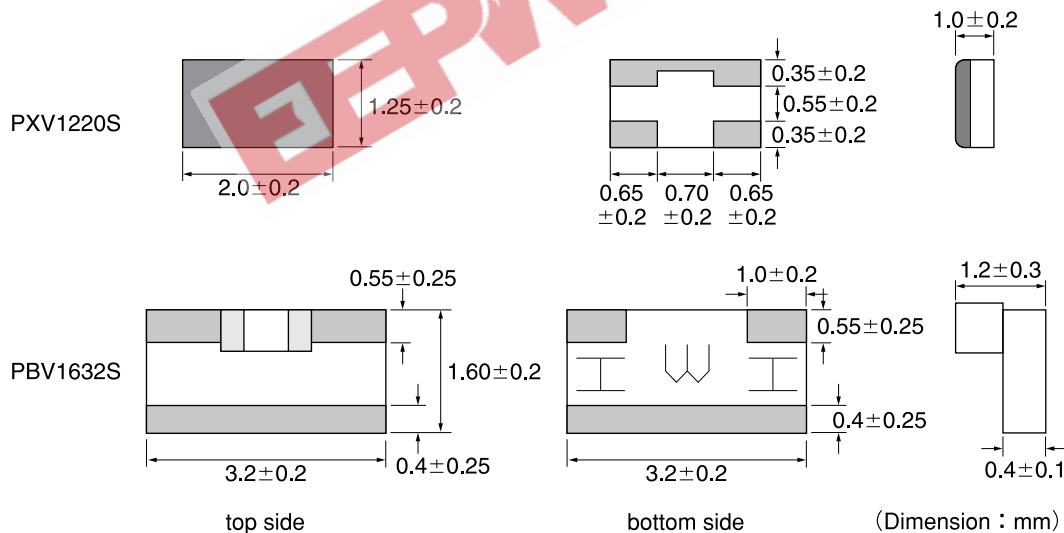
PBX1632S

Features

- Simplify compensation circuit for high frequency amplifier's output gain.
- 8 types of thermal characteristics are available for each of the 11 types of attenuations.
- Excellent temperature and noise characteristics due to thin film resistance elements.
- Operational frequencies are between DC and 3GHz.



Specifications



| Type | PXV1220S(0805) | PBV1632S(1206) |
|--|--------------------------------|--|
| Attenuation | 1,2, 3, 4, 5, 6, 7, 8, 9, 10dB | 1,2, 3, 4, 5, 6, 7, 8, 9, 10, 16dB |
| Attenuation Tolerance | ±0.5dB (@20°C, no load) | |
| Impedance | 50 ohm | |
| VSWR | less than 1.3 | |
| Temperature Coefficient of Attenuation | N1~N8 ex : 6dB | N1 0.0119dB/dB*°C N2 0.0088dB/dB*°C N3 0.0062dB/dB*°C N4 0.0047dB/dB*°C N5 0.0041dB/dB*°C N6 0.0035dB/dB*°C N7 0.0026dB/dB*°C N8 0.0019dB/dB*°C |
| Frequency Range | DC ~3GHz(6GHz) | |
| Rated Current | 63mW | 100mW |
| Operating temperature | -40°C~+100°C | |

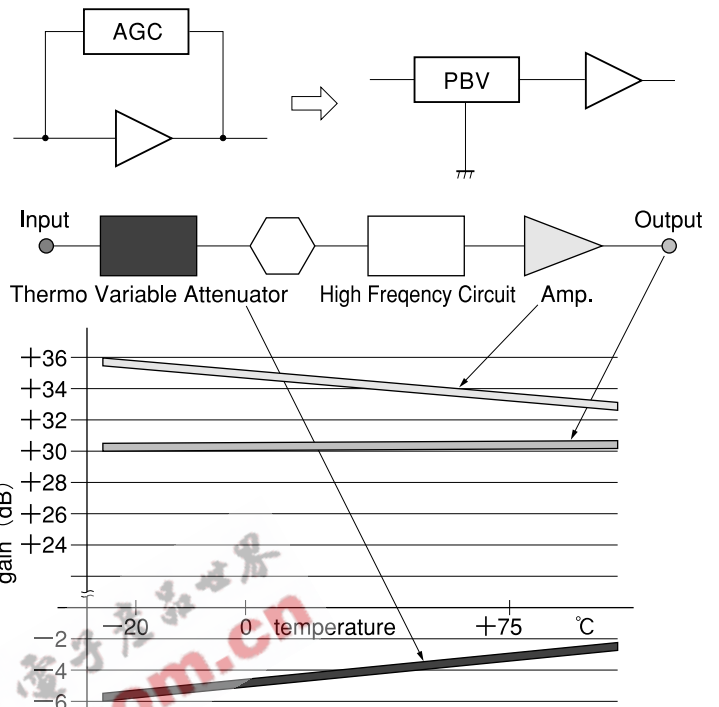
Application

Gain temperature compensation

To stabilize output gain of GaAs MOS-FET high power amplifier by replacing conventional temperature compensation circuits and simplify the complicate amplifier design without software program.

Outline of operation

The thermistor in a thermal sensitive attenuator varies power attenuation by changing the current of thermistor with temperature change. Rise in temperature is accompanied by decrease in power attenuation in this simple SMT chip temperature variable attenuator, and output gains in a GaAs amplifier decrease with rise in temperature. With these two effects combined, a stable output gain could be easily obtained regardless of temperature.



EEPW.com.cn