



THIN FILM PASSIVE COMPONENTS

| CAPACITORS | INDUCTORS | FILTERS | COUPLERS | FUSES |



CIRCUIT PROTECTION

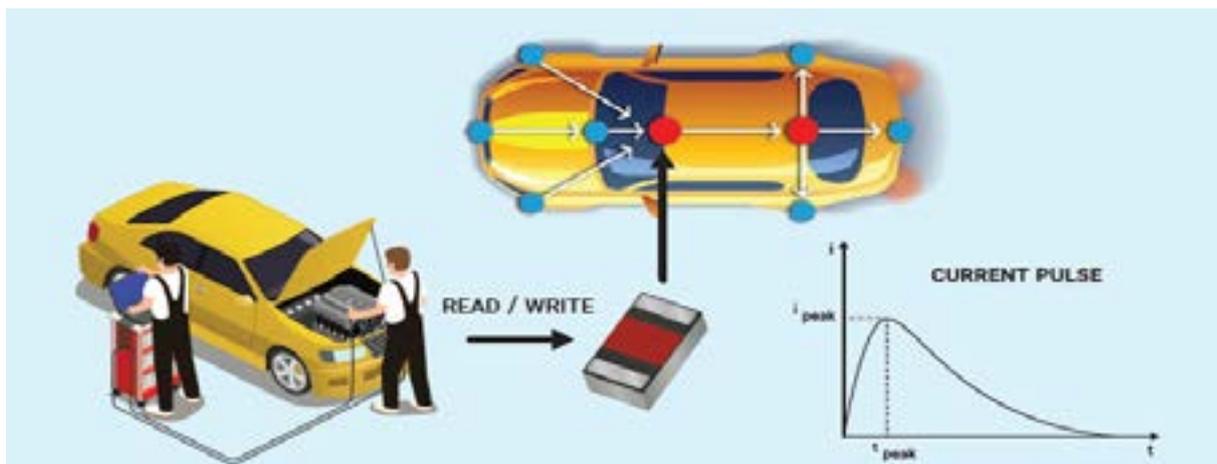
MINIATURE LOW CURRENT FUSES

- Fast acting
- High reliability
- Low current rating
- Sizes:
0402 / 0603 / 0805 / 1206
- Rated voltage:
63V (F0603), 32V (F0402)
- Approvals:
UL, cUL, RoHS, IATF
- Accurate current ratings:
28mA to 3A
- Typical lifetime:
20,000h vs 4h for competition
- Post fusing resistance:
> 1MΩ-20MΩ
- AECQ-200 version



VEHICLE TAMPERING

Vehicle tampering will inject a current pulse into the fuse. The blown fuse will then prevent access to the read/write function on the car's computer.



TYPICAL APPLICATIONS

- Base Station
- Heavy Duty Radios
- Medical
- Automotive
- Communication
- Instrumentation
- Battery Management System
- Home Appliances

ANTENNA / IMPEDANCE MATCHING

ACCU-P CAPACITORS

REPEATABLE RF PARAMETERS AT WORKING FREQUENCY

- Sizes:
0201 / 0402 / 0603 / 0805
- Ultra-tight tolerances:
 $\pm 0.01\text{pF}$ (**Z**), $\pm 0.02\text{pF}$ (**P**), $\pm 0.03\text{pF}$ (**Q**)
- Capacitance values start as low as 0.05pF
- Intermediate capacitance values within the range are available by request
- High Q and low ESR
- Meets or exceeds the requirements of AEC-Q200-3



ACCU-L INDUCTORS

REPEATABLE RF PARAMETERS AT WORKING FREQUENCY

- Sizes:
0201 / 0402 / 0603 / 0805
- Ultra-tight tolerances:
A($\pm 0.05\text{nH}$), **B**($\pm 0.1\text{nH}$), **C**($\pm 0.2\text{nH}$), **F**(1%), **G**(2%)
- High Q factor and high SRF
- High power dissipation
- Repeatable performance at high frequencies
- Meets or exceeds the requirements of AEC-Q200-3



TYPICAL APPLICATIONS

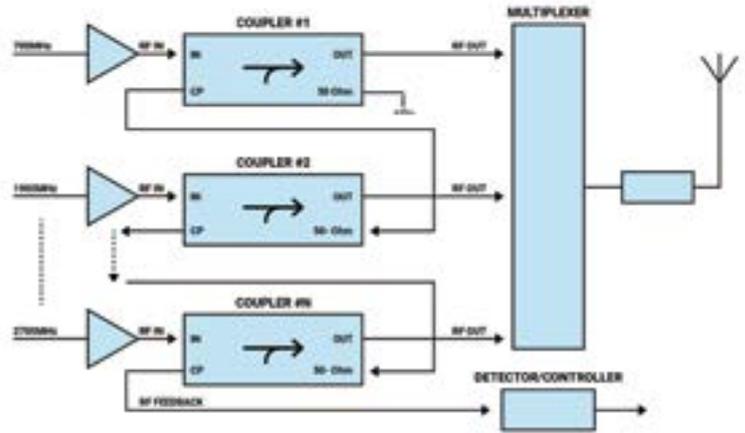
- Antenna Matching
- Collision Avoidance Systems
- Heavy Duty (ATEX) Radio
- Impedance Matching
- Infotainment Systems
- Keyless Entry
- Military
- Radar
- Real Time Location (GPS)
- V2V / V2X Communication

SIGNAL SAMPLING

DIRECTIONAL COUPLERS

HIGH DIRECTIVITY MINIATURE COUPLERS

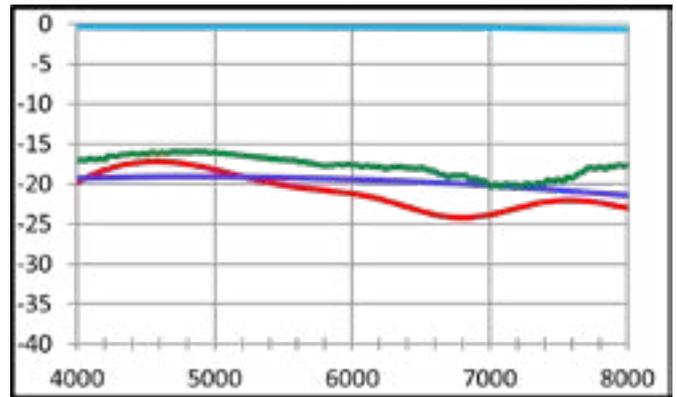
- Sizes:
0302 / 0402 / 0603 / 0805
- Wide operating frequency:
150MHz - 10GHz
- Power handling up to:
3W 0402 / 5W 0603 / 10W 0805
- Wide range of coupling factor -30dB up to -4dB
- Low insertion loss 0.2dB



WIDE BAND COUPLERS

UNIFORM COUPLING OVER THE RANGE

- Sizes:
0402
- Wide operating frequency:
500MHz - 8000 MHz
- Power handling up to:
3W 0402
- Low insertion loss 0.2dB

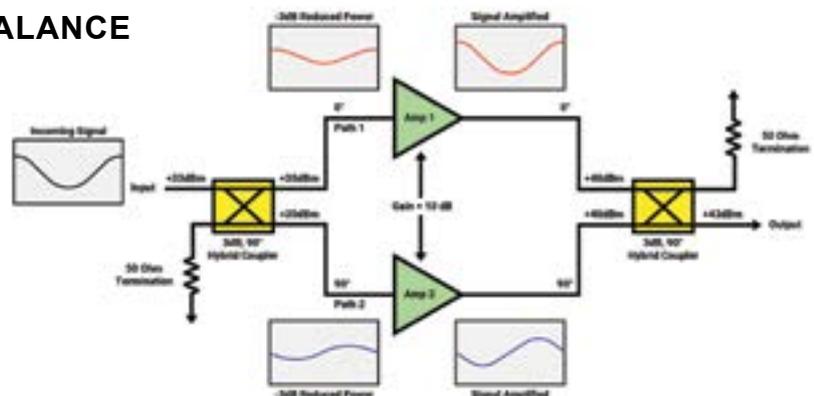


I.L, R.L, Coupling, Directivity

HYBRID 3dB-90° COUPLERS

EXCELLENT AMPLITUDE AND PHASE BALANCE

- Sizes:
0603 / 0805
- Wide operating frequency:
800MHz - 6GHz
- Power handling up to:
5W 0603 / 10W 0805
- Low insertion loss 0.2dB



TYPICAL APPLICATIONS

- Automotive
- Base Stations
- Radar
- Radio Communications
- Terminals

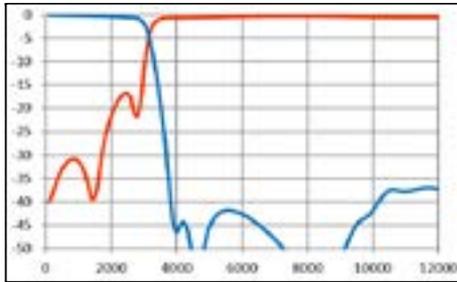


SIGNAL FILTERING

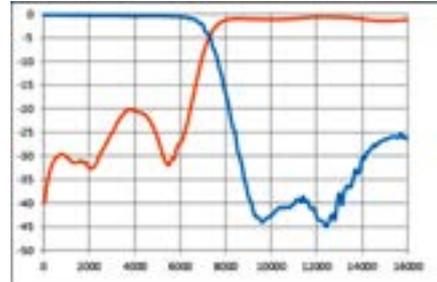
LOW PASS FILTERS

Power handling up to: **1W 0402 / 3W 0603 / 8W 0805 / 12W 1206 / 15W 2816**

Wide operating frequency: **470 MHz - 10 GHz**



1206 size, 3.5 GHz LPF 12W

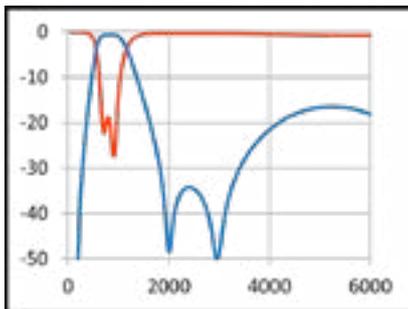


0805 size, 6 GHz LPF 8W

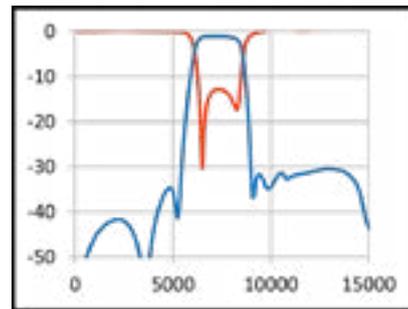
BAND PASS FILTERS

Power handling up to: **5W 0805 / 8W 1206**

Wide operating frequency: **800 MHz - 7.5 GHz**



1206 size
Central frequency: 0.8 GHz
Passband: 250 MHz

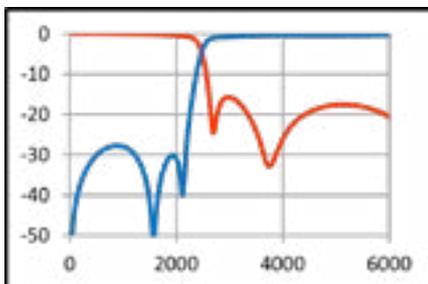


0805 size
Central frequency: 7.25 GHz
Passband: 1.25 GHz

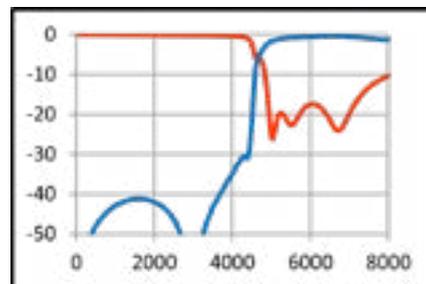
HIGH PASS FILTERS

Power handling up to: **5W 0805 / 8W 1206 / 15W 2816**

Wide operating frequency: **1.0 GHz - 6.0 GHz**



0805 size, 2.7 GHz HPF 5W



0805 size, 5.150 GHz HPF 5W

TYPICAL APPLICATIONS

- Active Antenna
- Automotive
- Base Stations
- Consumer
- Emergency Services
- Handheld Radios
- Military
- Test Equipment

ADVANTAGES:

- Low Insertion Loss
- Steep Roll-Off
- High Repeatability
- Part-to-Part
- Lot-to-Lot
- Temperature Stability
- Custom Made Filters
- Short Lead Time:
4 - 10 Weeks ARO

ABOUT KYOCERA AVX

KYOCERA AVX is a worldwide leading supplier of passive electronic components, connectors, passive and active antennas, sensors and control units. KYOCERA AVX offers a wide range of components manufactured to the highest quality and reliability standards.

Our products include ceramic, solid electrolytic and film capacitors, pulse supercapacitors, varistors, thermistors, filters, inductors, diodes, antennas, connectors, sensors and control units. Our worldwide manufacturing capability includes facilities located in seventeen countries on four continents, allowing us to continue meeting customer needs on a global basis.

KYOCERA AVX is committed to supporting the needs of its customers for applications today and in the future. Together with continuous quality improvement process, KYOCERA AVX components provide reliable solutions for consumer application needs.

As a technology leader, KYOCERA AVX will continue to add to its product portfolio on a regular basis. Details of new devices being offered and their specifications will be shown on the KYOCERA AVX website: WWW.KYOCERA-AVX.COM.

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