

IR WIDE BAND PASS FILTERS

GENERAL SPECIFICATION

- Substrate: Silicon Wafer
CZ – N or P type – 1-0-0 or 1-1-1 – 1-30 Ohm/cm
Dia. 100.00mm +0.15 / -0.30mm
Thickness: 0.525mm +/-0.025mm
- Possible Substrate : Germanium Wafer, Sapphire Wafer, etc.
- Durability test method
Humidity – MIL-C-48497A 4.5.3.2.
Moderate – MIL-C-48497A 4.5.3.3.
Adhesion – MIL-C-48497A 4.5.3.1.
Water immersion 90 minutes at 100℃
720 hours at 50℃
Tape adhesion After both water immersion test

LIST OF PRODUCTS

- IR WBPF 8um ~ 14um
- IR WBPF 8.5um ~ 12.0um
- IR WBPF 3.10um ~ 4.20um
- IR WBPF 3.90um ~ 5.0um

[8 μm ~ 14 μm]

Cut-on wavelength: 8.00 μm +/-0.2 μm

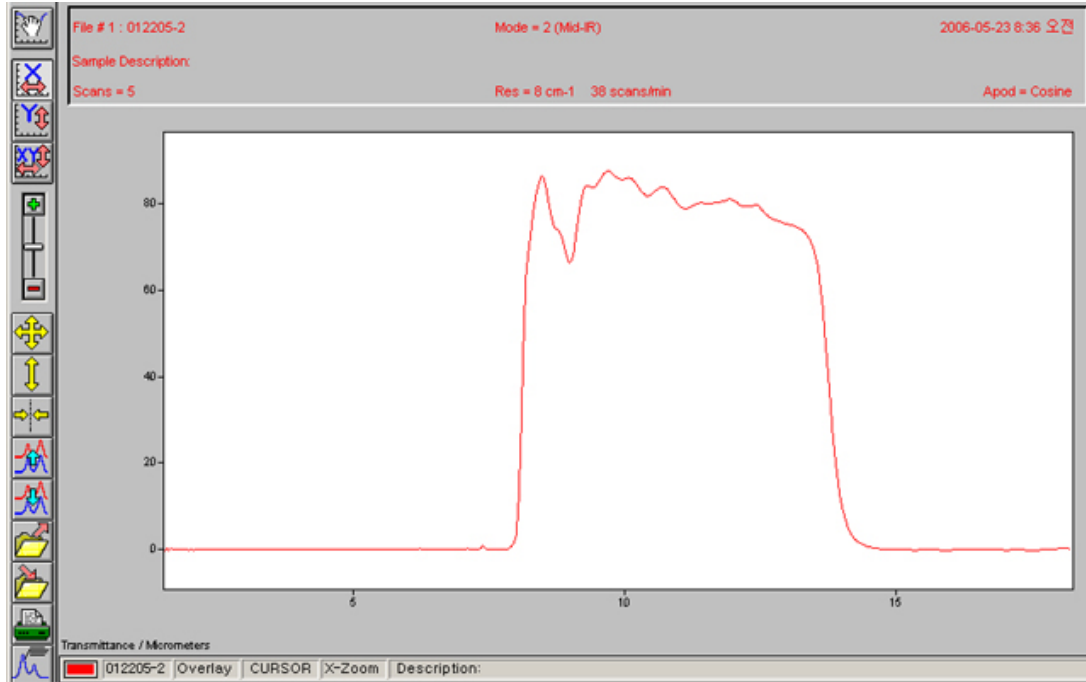
Cut-off wavelength: 14.0 μm +/-0.5 μm

Average Transmittance between half power points: >/= 75%

Visual to passband Tave. : </= 0.1%

Visual to passband Tabs. : </= 1.0%

Passband to 20um Tabs. : </= 1.0%



[8.5 μm ~ 12.0 μm]

Cut-on wavelength: 8.50 μm +/-0.2 μm

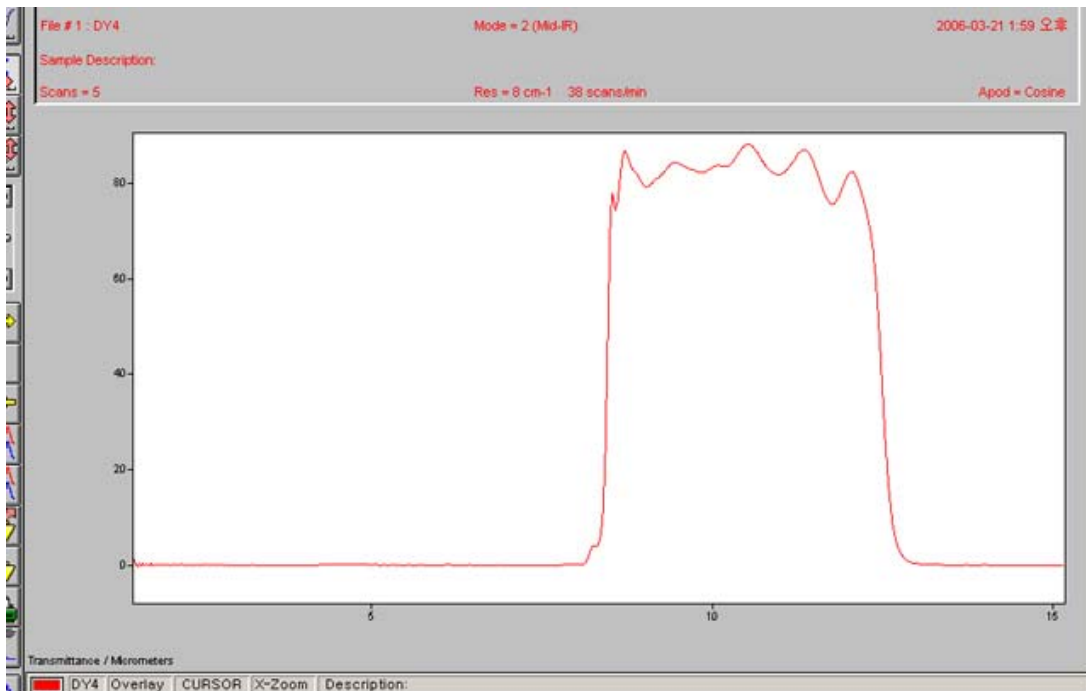
Cut-off wavelength: 12.0 μm +/-0.5 μm

Average Transmittance between half power points: >/= 80%

Visual to passband Tave. : </= 0.1%

Visual to passband Tabs. : </= 1.0%

Passband to 20um Tabs. : </= 1.0%



[3.10 μm ~ 4.20 μm]

Cut-on wavelength at 5%: 2.925 μm +/-0.075 μm

Cut-on wavelength at 80%: 3.050 μm

Cut-off wavelength at 80%: 4.250 μm

Cut-off wavelength at 5%: 4.375 μm +/-0.075 μm

Cut-on Slope: < 4%

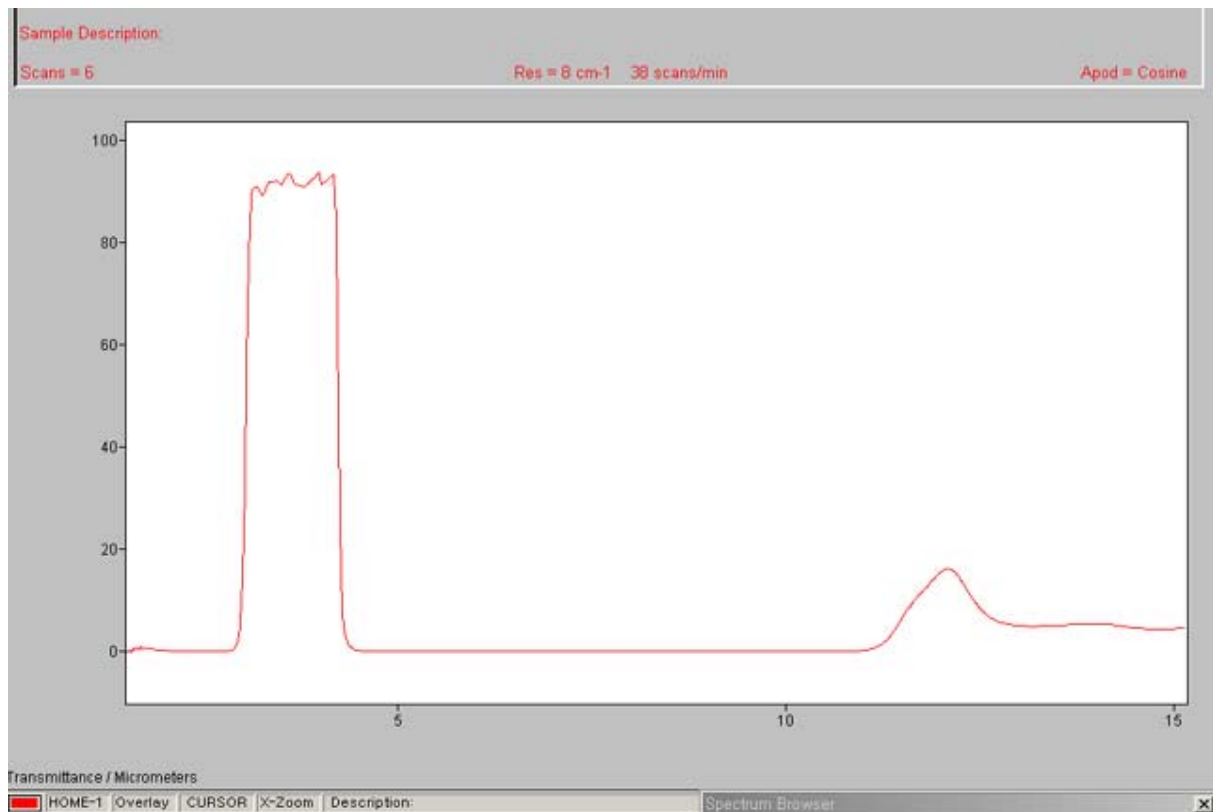
Cut-off Slope: < 3%

Average Transmittance from 3.10 μm ~ 4.20 μm : >= 85%

Visual to passband Tave. : <= 0.1%

Visual to passband Tabs. : <= 1.0%

Passband to 12 μm Tabs. : <= 1.0%



[3.90 μm ~ 5.00 μm]

Cut-on wavelength at 5%: 3.725 μm +/-0.075 μm

Cut-on wavelength at 80%: 3.850 μm

Cut-off wavelength at 80%: 5.050 μm

Cut-off wavelength at 5%: 5.175 μm +/-0.075 μm

Cut-on Slope: < 3.5%

Cut-off Slope: < 2.5%

Average Transmittance from 3.90 μm ~ 5.00 μm : >= 85%

Visual to passband Tave. : </= 0.1%

Visual to passband Tabs. : </= 1.0%

Passband to 12um Tabs. : </= 1.0%

